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PCT International Patent Applications

Electronics
Chemistry / Material
Biotechnology
Machinery

SEOUL NATIONAL UNIVERSITY

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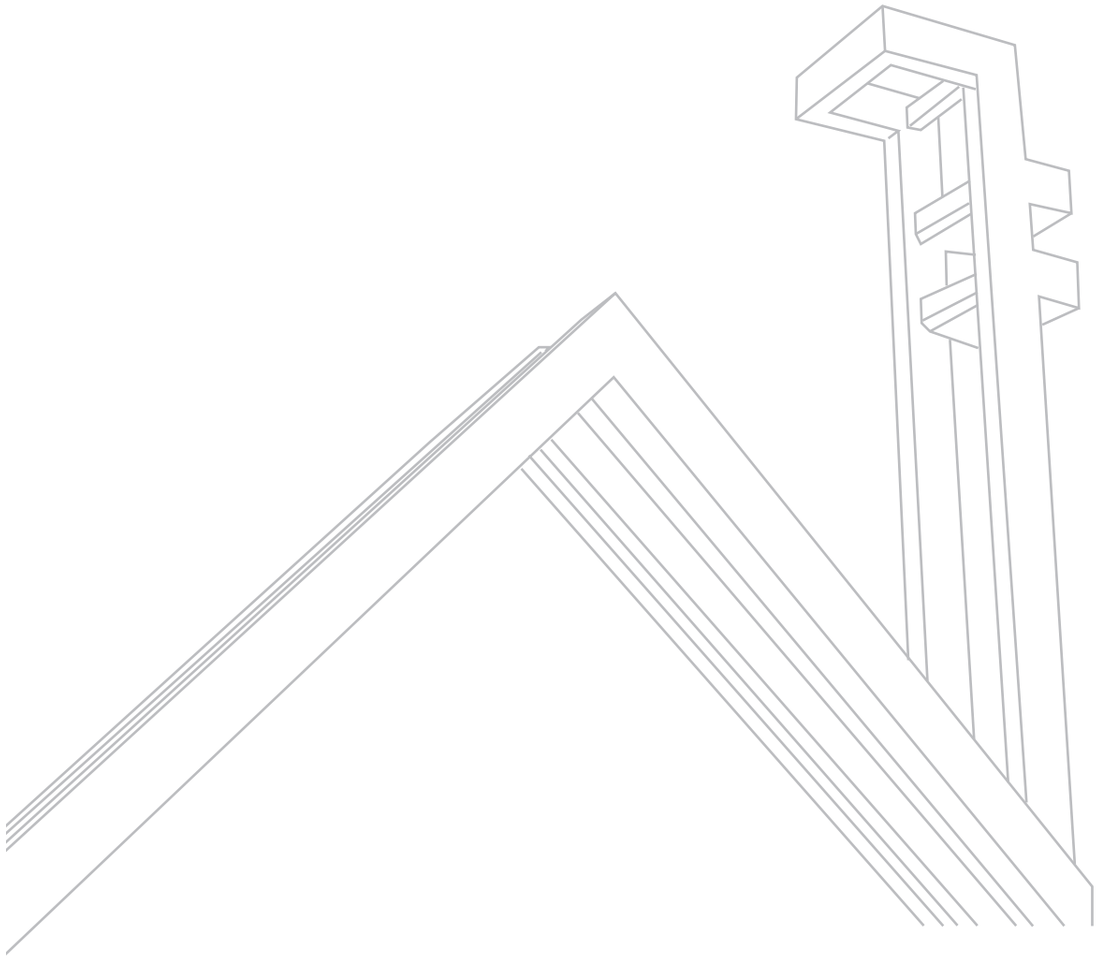
– PCT International Patent Applications –



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Brief Descriptions of Technologies

Electronics

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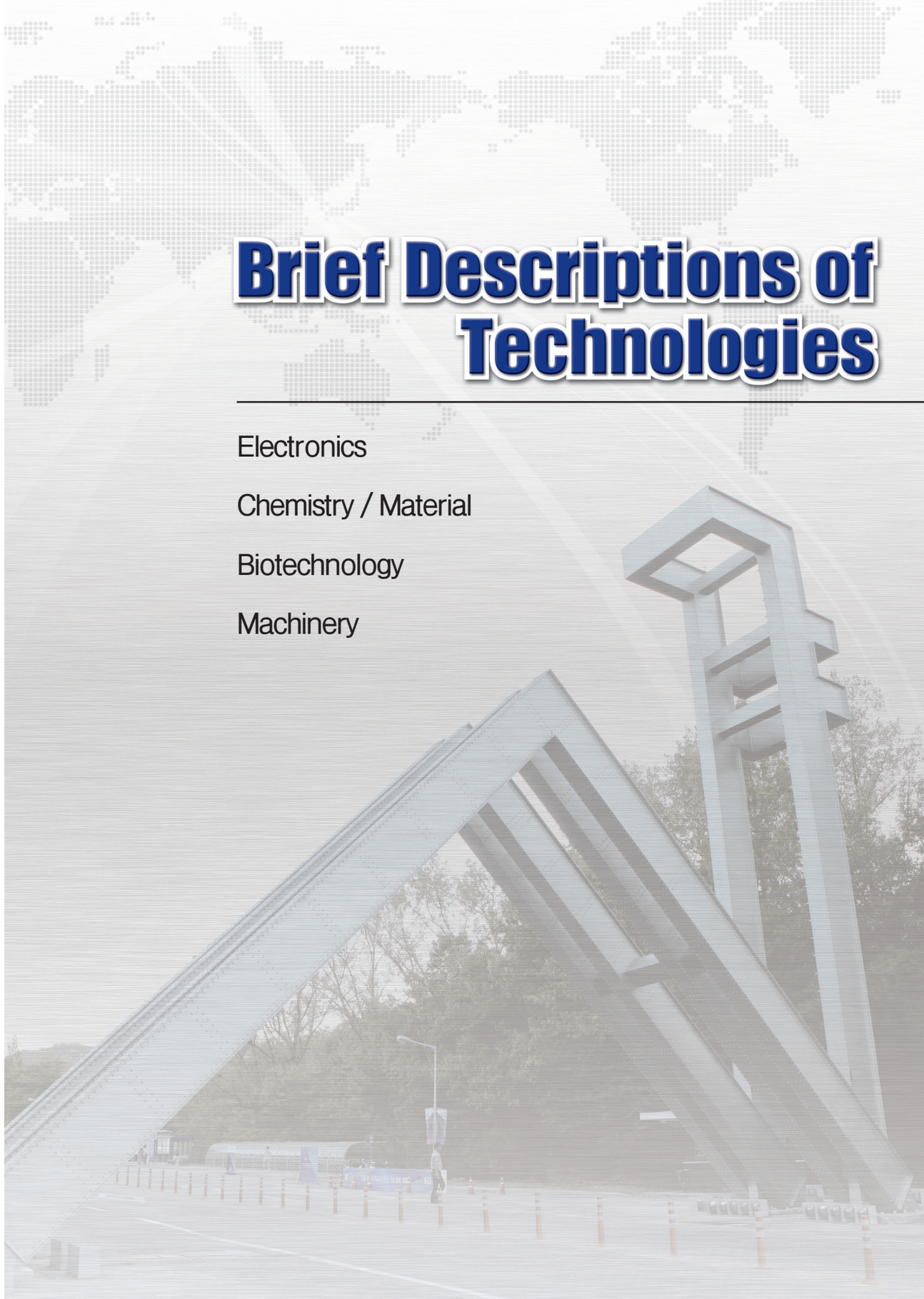
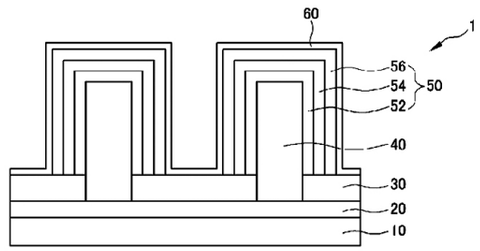


Light-emitting element using Graphene

Core

PCT / KR2011 / 007460

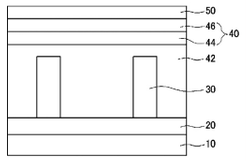
A light-emitting element, which is formed using a fine structure grown toward the upper side of a graphene.



Light-emitting element using Graphene

PCT / KR2011 / 007461

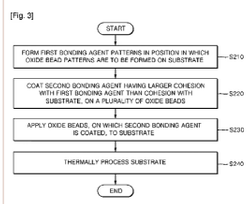
A light-emitting element, which is formed using a fine structure grown toward the upper side of a graphene, wherein a thin film layer is formed between the fine structure and the light-emitting element for coating the fine structure.



Fabricating a substrate where patterns are formed

PCT / KR2009 / 002154

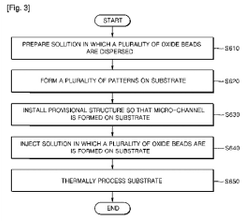
A method of fabricating a substrate where patterns are formed, and according to the invention, a plurality of low-priced oxide beads can be patterned on a substrate to have a desired shape so that damages can be prevented from occurring in the substrate during dry etching.



Fabricating a substrate where patterns are formed

PCT / KR2009 / 002253

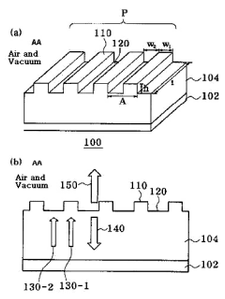
A method of fabricating a substrate where patterns are formed, and according to the invention, a plurality of low-priced oxide beads can be patterned on a substrate to have a desired shape so that damages can be prevented from occurring in the substrate during dry etching.



III-nitride surface grating reflector

PCT / KR2009 / 005996

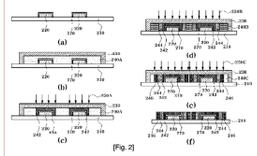
A III-nitride surface grating reflector, among the lights incident from the inside of the III-nitride layer, lights cause destructive interference whereby the incident lights are reflected on a surface of the structure of the graing pattern.



Method for coating light-emitting devices, light coupler

PCT / KR2010 / 001893

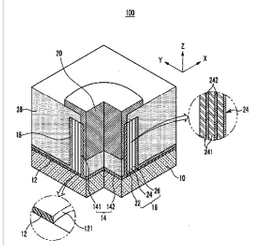
A method for coating light-emitting devices, applying uniformly phosphor on the surface of the light-emitting device.



Light-emitting device

PCT / KR2010 / 003143

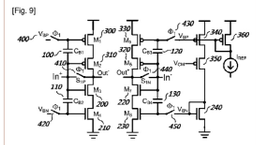
A light-emitting device, which is producted using nano structures formed in a direction perpendicular to the planar surface of a basic plate.



Dynamic bias current-starved inverter

PCT / KR2010 / 003516

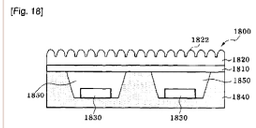
Dynamic bias current-starved inverter(DSINV) circuit which secures a broad bandwidth on dynamic operating mode, minimizes power waste and output error, and achieve a high gain by the circuit provided in the invention.



Composite film for LED

PCT / KR2010 / 006580

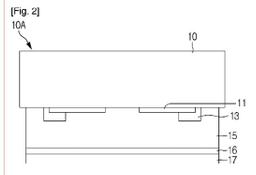
A composite film to be used in a LED device comprising a light-emitting element and the composite film comprising phosphor and an optical plate achieves improving yield rate.



PDP having a diffusion barrier

PCT / KR2010 / 006608

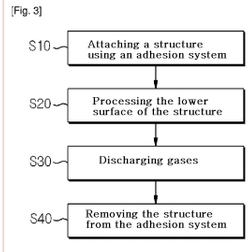
A plasma display panel having a diffusion barrier and by preventing the diffusion of impurities, discharging is stabilized during an initial period of aging, the plasma display panel can be driven at a low voltage, and the discharging efficiency of the plasma display panel can be improved.



Bottom-up processing of a structure using an adhesion system having fine ciliary

PCT / KR2011 / 000765

A method and apparatus for bottom-up processing of a structure using an adhesion system having fine ciliary, which enable the structure to be significantly conveniently attached/detached, and which support the structure in a stable and firm manner.



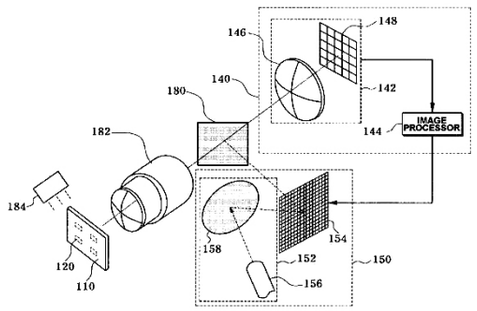
Electronics
Semiconductor device and Process

Image processing-based lithography system

Core

PCT / KR2010 / 006602

A lithography system providing a new process which has cost-efficiency, a high processing speed and a high productivity.

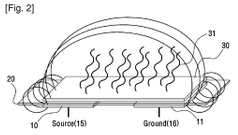


Capacitive element sensor

PCT / KR2010 / 002883

The present invention provides a simple manufacturing process, so that it is possible to reduce production cost and to improve the reliability of the measure.

[Fig. 2]

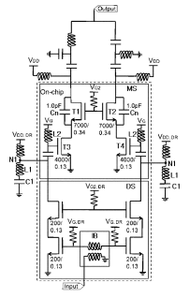


A class E power amplifier

PCT / KR2010 / 008977

A class E power amplifier which reduces voltage stress applied to a CMOS transistor, forms a higher load impedance and minimizes interference to other circuits in operation.

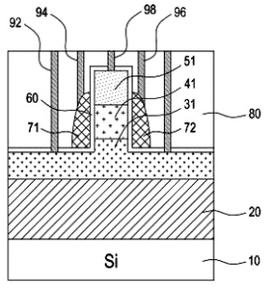
[Fig. 6]



Compound tunneling field effect transistors integrated on a silicon substrate

PCT / US2011 / 068064

The present invention provides compound tunneling field effect transistors integrated on a silicon substrate and methods for fabricating the same for simultaneously forming peripheral circuit in optical device fabrication process on a silicon substrate, wherein the method shifts easily the threshold voltage of each device.



Electronics
Memory

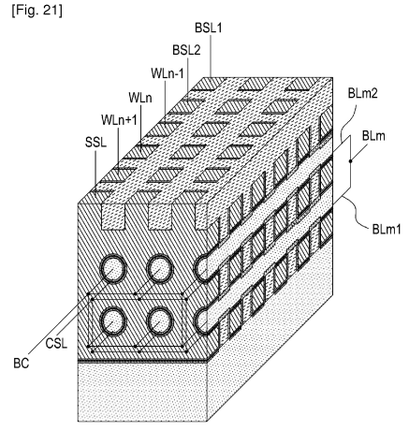
A semiconductor device having a stacked array structure

Core

PCT / KR2009 / 007663

A semiconductor device having a stacked array structure, which has gate all around(GAA) structure, so that control of gate for each channel has the effect of improved.

[Fig. 21]

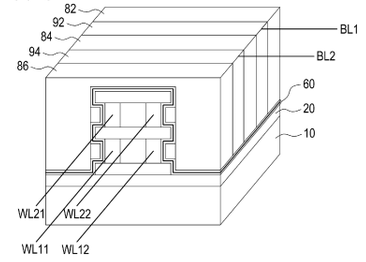


A stacked NOR flash memory array

PCT / KR2010 / 000704

A stacked NOR flash memory array and a method of manufacturing same, which enables memory capacity to be increased by as much as necessary through vertical stacking.

[Fig. 10]

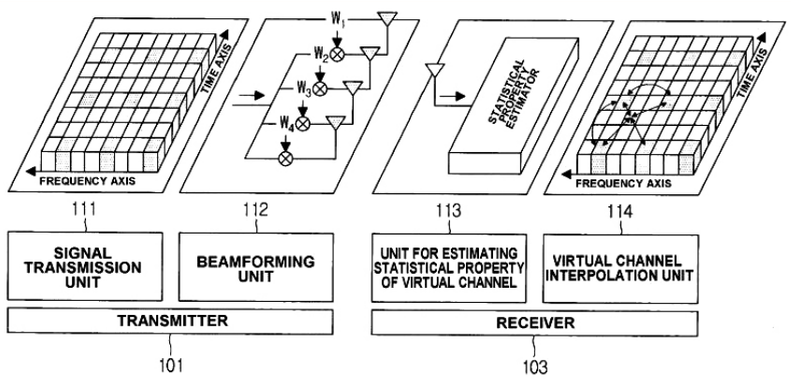


Estimating a channel using a dedicated pilot signal in an OFDM-based wireless communication system

Core

PCT / KR2010 / 008401

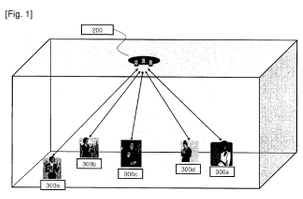
A method for estimating a channel using a dedicated pilot signal in an OFDM-based wireless communication system using a transmission beamforming technique and a multi-antenna transmission technique, which can minimize channel estimation errors and can maximize a throughput of a system by adaptively determining an optimum dedicated pilot pattern according to the environment through a relationship analysis between a pilot signaling overhead and a channel estimation error, and can obtain large gains in the incorrect channel estimation environment.



A positioning system based on a radio communication apparatus including multiple antennas

PCT / KR2010 / 000875

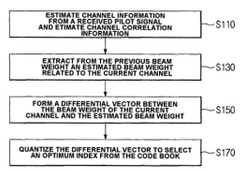
A positioning system based on a radio communication apparatus including multiple antennas, which calculates a position of a terminal using only a single communication apparatus in which the multiple antennas are mounted, and calculates the position of the terminal more accu-rately by using tWOor more communication apparatuses.



Transmitting beamforming in an orthogonal frequency division multiplexing (OFDM)-based MIMO wireless system

PCT / KR2011 / 000114

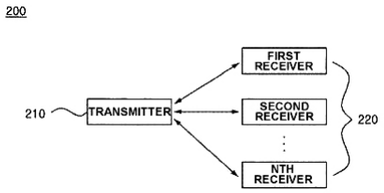
A method for transmitting beamforming in an orthogonal frequency division multiplexing (OFDM)-based MIMO wireless system, reduces the channel quantization error and feedback load, wherein a receiver estimates current channel information by using time and 2D channel correlation information of a frequency based on the previous channel information, compares the estimated current channel information with an actual channel and then feeds back the differential channel information.



Transmitting multi-radio power using a time division mode in an exclusive power transmission time

PCT / KR2011 / 001025

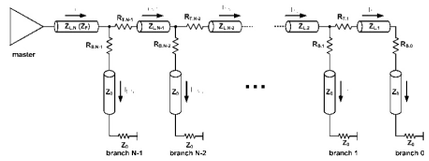
A multi-radio power transmission method, which wirelessly transmits power to each of at least one of the receivers using a time division mode in an exclusive power transmission time, so that it is possible to maintain high and uniform power transmission efficiency with respect to a plurality of receivers.



Multi drop bus system and impedance matching method

PCT / KR2011 / 001117

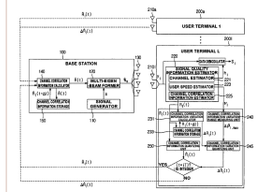
The present invention provides the uniform transmission of power without excessive increase of resistance value for impedance matching.



Transmitting a signal to multiple user terminals using multiple antennas in a radio communication system

PCT / KR2011 / 002410

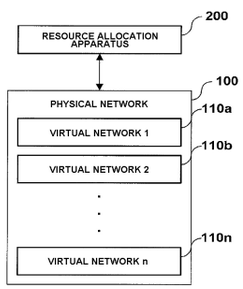
A method for transmitting a signal to multiple user terminals using multiple antennas in a radio communication system, which reduces the number of quantization bits without a decrease in the system capacity so that it is possible to reduce the amount of uplink feedback information or to enhance the performance of the system with the same number of quantization bits.



Resource allocation in a virtual network of a resource allocation device

PCT / KR2011 / 004544

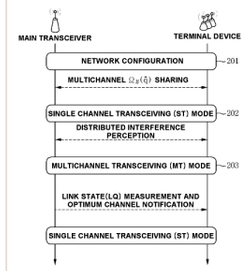
A method for resource allocation in a virtual network of a resource allocation device, sets the path and allocates the bandwidth, so that the method is suitable for reducing waste of unnecessary resources and efficiency of network.



Transmitting a signal while avoiding the influences of an interference signal in the same channel

PCT / KR2011 / 006539

A method for transmitting a signal while avoiding the influences of an interference signal in the same channel, temporarily transceive signals using a plurality of available transmission channels and determines the channel having a best link state as a transmission channel from among the plurality of used transmission channels and returns to an existing transmission system using a single channel.

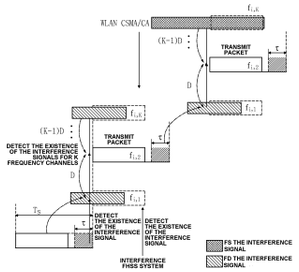


Electronics
Signal Processing

Avoiding interference signal in frequency hopping spread spectrum system

PCT / KR2011 / 009253

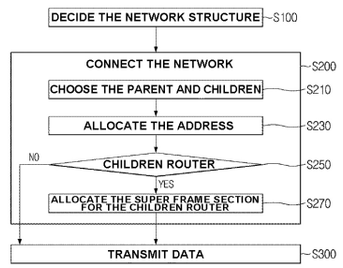
A method for transmitting and receiving signal through avoiding same and different kind of interference signals in a same band of FHSS system, improves performance of wireless communication system, i.e., bluetooth.



Self configuration of wireless sensor network(WSN) based on the cluster tree structure

PCT / KR2012 / 000484

A method for self configuration of wireless sensor network(WSN) based on the cluster tree structure, enables performance of large scale self configuration of WSN to improve.



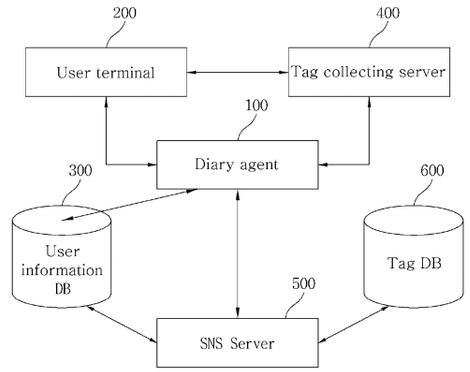
Electronics
Mobile Communication

Providing a diary-based social network service

Core

PCT / KR2011 / 003820

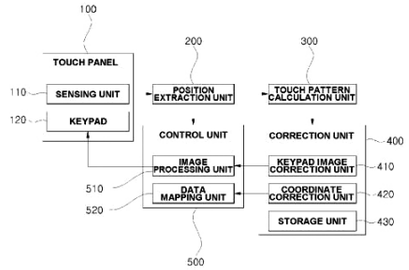
A method for providing a diary-based social network service, enables a user to create a diary about his own life in order to meet a desire to express himself and provides a social network service by utilizing tagging information in the created diary to form a new social network with people or specialist who have the same interests.



Inputting character using a touch panel

PCT / KR2011 / 008182

A method for inputting character using a touch panel formed with a key pad in a display surface, which provides a user with optimized keypad interface.



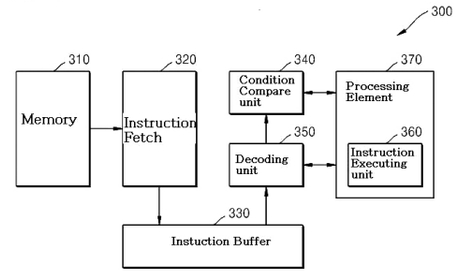
Processing instructions by processing element

Core

PCT / KR2011 / 001044

Processing instructions by processing element which can proceed a branch statement with high speed, in the processing element constituting CGRA or SIMD by DISE method.

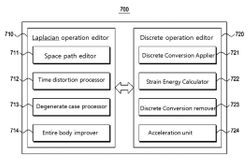
[Fig. 3a]



Motion editing multiple synchronized characters

PCT / KR2009 / 003307

A motion editing system which edits motions of multiple synchronized characters by editing a spatial route of inputted data, processing the distortion of the interaction time, and applying a discrete transformation.

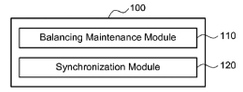


Controlling a data-based biped

PCT / KR2010 / 004943

Controlling a biped character which provide controlling a biped based on a data improving balance-keeping of the biped, in spite of various simulating environment and physical disturbance.

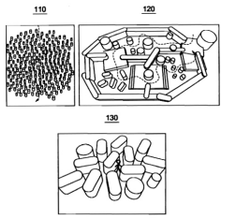
[Fig. 1]



Controlling motion of character

PCT / KR2011 / 000928

Controlling character in complex virtual environment which can modify 3D path information and change motion fragment, based on constraint information.

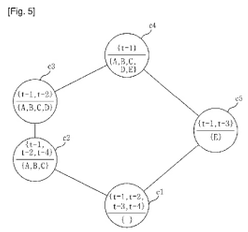


Concept lattice-based query term mapping system

PCT/KR2011/002264

A concept lattice-based query term mapping system which collects terms (terms in use) used correlatively with one another by a plurality of users, and represents terms associated with specific terms (query terms) in a graph.

[Fig. 5]

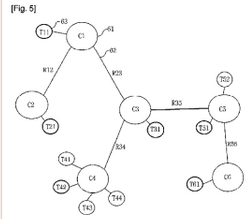


Terminology-editing system

PCT / KR2011 / 002623

A terminology-editing system based on reference terminologies which structurally store information on patients, and ensure the re-usability of the information based on the information storage system, as well as interoperability for the mutual exchange of medical information.

[Fig. 5]

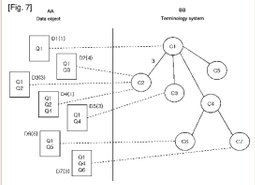


System for supporting data object definition

PCT / KR2011 / 002749

A terminology-system-based system for supporting data object definition, which delimits a concept by means of a qualifier. Using the system. new data objects can be more systematically and conveniently defined.

[Fig. 7]

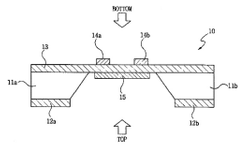


Electronics
Etc.

Micro calorimeter device with improved accuracy

PCT / KR2009 / 002941

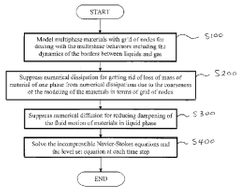
A micro calorimeter device with improved accuracy having a new design based on a silicon nitride thin platform implemented with a Nano Electro-Mechanical System(NEMS) processing technology.



Semi-lagrangian CIP fluid solver

PCT / KR2010 / 001892

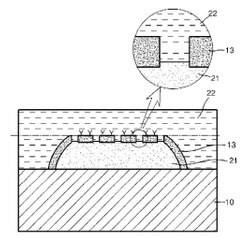
A new constrained interpolation profile method, which is stable and accurate but requires less amount of computation.



Transducer and method for manufacturing same

PCT / KR2010 / 006466

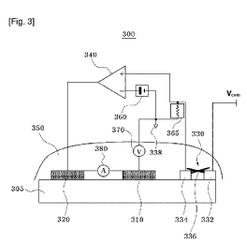
A transducer and a method for manufacturing same in which a first liquid and a second liquid are supplied such that, at the boundary therebetween, a deformation-generating part, including a perforated structure having one or more holes therein, in formed, and the effect of external pressure is negated by the action between the liquids.



Reference potential adjustment device

PCT / KR2011 / 001006

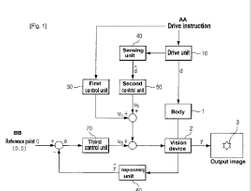
A reference potential adjustment device which can be easily manufactured and reduce a price, comparing to a conventional reference electrode using Ag/AgCl.



Controlling a drive instruction-based vision device

PCT / KR2011 / 001190

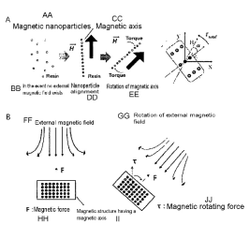
A control system and method for a drive instruction-based vision device and uses a drive instruction, or the drive instruction and a drive information sensed in a robot together.



Method for magnetically controlling a magnetic structure

PCT / KR2011 / 002239

A method for magnetically controlling a magnetic structure. Using the prevent invention, various magnetic structures can be made with various magnetic axis and improve time and price for manufacture.

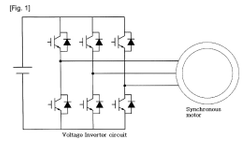


Electronics
Etc.

Winding-type synchronous machine

PCT / KR2011 / 002756

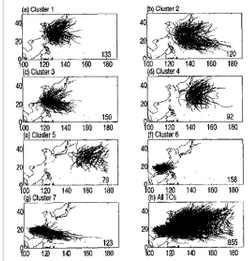
Winding-type synchronous machine including winding-type synchronous motor or generator having mover built in inverter circuit. According to the present invention, problem about use of rare-earth permanent magnet can be solved, and the winding-type synchronous machine which not cause pulsation problem can be implemented.



Prediction model for summer typhoon track

PCT / KR2011 / 006772

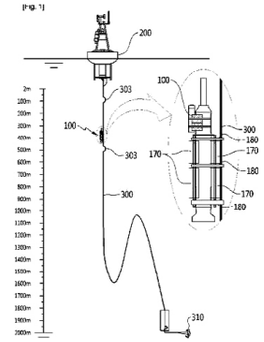
A prediction model for summer typhoon track in the Pacific Northwest. According to the present invention, the tracks of the typhoons from June until October over the entire area of the Pacific Northwest may be more precisely predicted.



Oceanographic observation buoy system

PCT / KR2011 / 007212

An oceanographic observation buoy system using a wireless communication modem. According to the present invention, a separate wired communication cable is not required since data of the profile device and the buoy device is processed for exchange therebetween using a wireless communication modem, so that a corresponding system can be quickly and simply installed, and maintenance and repair work can easily be carried out.



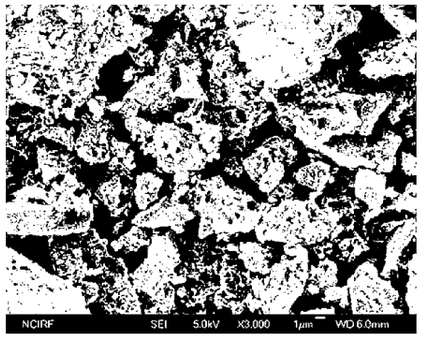
Chemistry/Material
Secondary Battery

Amorphous anode active material for secondary battery electrode

Core

PCT / KR2010 / 005299

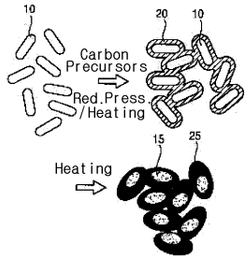
An amorphous anode active material, comprising at least one of amorphous metal oxide (or phosphate) with improved storage space of lithium, sodium, etc. and improved diffusion velocity of ions.



Metal oxide-carbon nanocomposite for secondary battery electrode

PCT / KR2010 / 005725

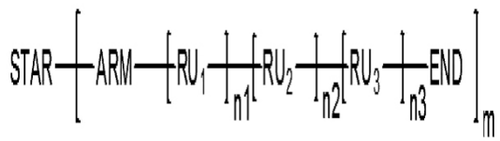
Preparation of metal oxide-carbon nanocomposite, comprising: heating mixture of nanoparticles (10) and carbon precursors under reduced pressure to form organic coating layer (20); and heating to form metal oxide nanoparticles (15) encompassed by a carbon substrate (25).



Organic/inorganic star-shaped composite polymer for polymer electrolyte of secondary battery

PCT / KR2011 / 002345

Organic/inorganic star-shaped composite polymer with improved mobility of polymer chain due to higher density of polymer chain in outer part than in inner part.



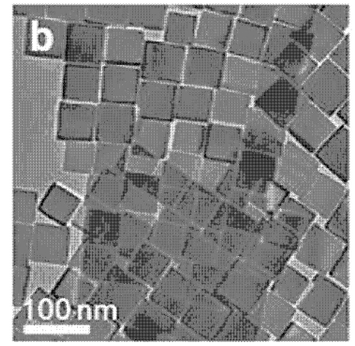
Chemistry/Material
Nano-material

T2 MRI contrast agent

Core

PCT / KR2011 / 004328

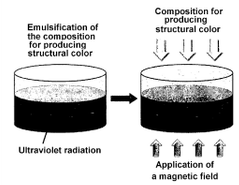
T2 MRI contrast agent for cell contrast, comprising magnetic nanoparticles with ferrimagnetism at room temperature.



A method for forming a microsphere having a structural color

PCT / KR2010 / 002302

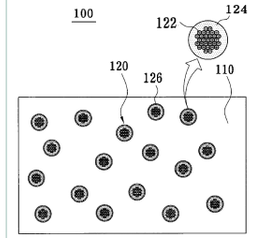
Forming a microsphere having a structural color, comprising: providing composition including magnetic nanoparticles dispersed in curing material; emulsifying with solvent; applying magnetic field; and curing.



Structural color producing method

PCT / KR2010 / 002303

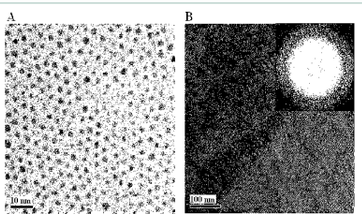
A structural color printing method, comprising: forming composition layer comprising magnetic nanoparticles (120) and curing material (110) on a first substrate; applying magnetic field to express structural color; and curing to form structural color printing layer.



A method for mass production of Ag nanoparticles with uniform size

PCT / KR2011 / 002522

A method for mass production of silver nanoparticles having a uniform size, comprising: heating mixture of silver precursors and surfactants in inert atmosphere to produce silver nanoparticles, and isolating the silver nanoparticles.



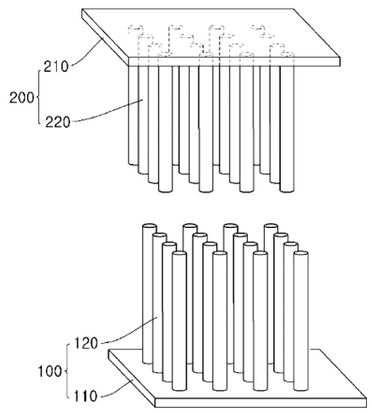
Chemistry/Material
Nano-structure

Dry-attachment fastening(interlocking) system using micro-cilia

Core

PCT / KR2010 / 000899

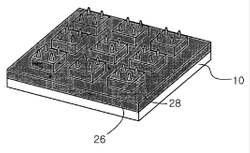
A dry-attachment interlocking system, comprising: a first attachment member (100) having a first micro-cilia (120) formed on a first substrate (110); and a second attachment member (200) having a second micro-cilia (220) formed on a second substrate (210).



Process for formation of hierarchical microstructure using partial curing

PCT / KR2009 / 002052

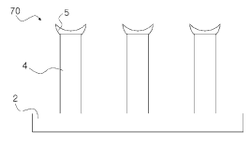
Simplified formation of hierarchical microstructure, comprising: forming a first polymer pattern (26) having a partial curing layer (24); and forming a second polymer pattern (28) thereon using said partial curing layer.



A miniature cilia structure for vacuum adhesion

PCT / KR2009 / 007737

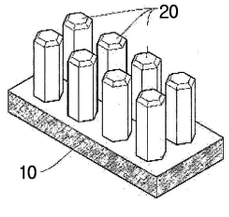
A miniature cilia structure (70), comprising: a substrate (2); miniature cilia (4) on the substrate; and vacuum adhering portion (5) on the top end of each miniature cilium including a protrusion (6) to contact an object to be adhered on and a recess (8) for vacuum adhesion.



Nano device for graphene-based electronic/optical elements

PCT / KR2010 / 003354

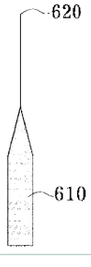
Nano device in which one or more vertically grown nanostructures (20) formed on a carbon layer (10) including graphene of single layer and single crystal graphite of two or more layers.



Field-emitting conductive nanostructure for AFM

PCT / KR2011 / 001250

A field-emitting nanostructure comprising: conductive substrate (610); conductive nanostructure (620) arranged thereon; and conductive interface compound formed in the interface between the conductive substrate and the conductive nanostructure.



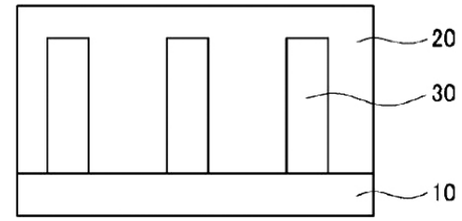
Chemistry/Material
Solar cell

Solar cell comprising thin film covering micro-structures on carbon structure layer

Core

PCT / KR2011 / 007995

Solar cell comprising: carbon structure layer (10); micro-structures (30) on the carbon structure layer; and thin film (20) comprising isolation-junction portion for electrical charge covering the micro-structures.



Graphene for transparent electrode of solar cell

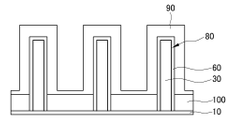
PCT / KR2011 / 001642

A method of forming graphene using an amorphous carbon layer comprising: forming amorphous carbon layer (110) on a substrate (100); forming graphitizing catalyst layer (120) thereon; and heating to crystallize the amorphous carbon layer, thereby forming graphene layer (130).

Solar cell comprising micro-structures on carbon structure layer

PCT / KR2011 / 007993

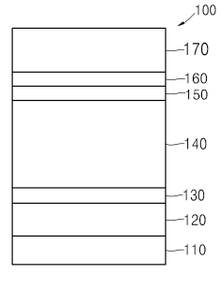
Solar cell comprising: carbon structure layer (10); micro-structures (30) on the carbon structure layer; and isolation layer (60) for electrical charge comprising isolation-junction portion (80) for electrical charge formed on a surface of the micro-structures.



Thin film of low MW substance with BHJ for organic solar cell

PCT / KR2012 / 000953

Preparation of thin film of low molecular-weight (MW) substance with bulk hetero-junction (BHJ) using alternate thermal deposition, comprising: providing first and second low MW substances into separate crucibles; and heating the crucibles while rotating substrate under vacuum to deposit alternately.



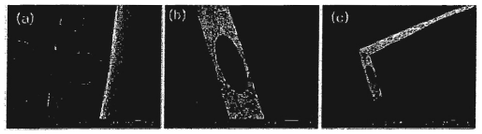
Chemistry/Material
Functional polymer

A polymer actuator for biomedical application (e.g. catheter)

Core

PCT / KR2010 / 000534

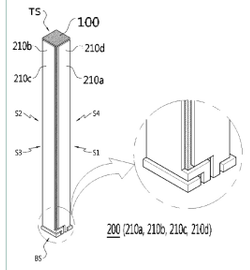
A polymer actuator comprising: (i) columnar electroactive polymer laminate; and (ii) a plurality of electrode coating layers on a part of the surface of the columnar laminate.



An electroactive polymer actuator for biomedical/robotics application

PCT / KR2010 / 004201

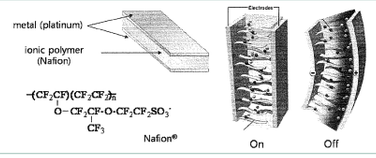
An electroactive polymer actuator capable of continuous 3-dimensional morphing, comprising two or more pairs of surface electrodes (200) on the surface of an ion-exchange polymer material (100).



An electroactive polymer actuator for biomedical application (e.g. thrombolysis)

PCT / KR2011 / 000483

An electroactive polymer actuator comprising: (i) columnar electroactive polymer laminate; (ii) a plurality of electrode coating layers on a part of surface of the columnar laminate; and (iii) encapsulation coating layer for encapsulating the electrode coating layers.



Polyester resin containing polycarbonate diol for coating material

PCT / KR2011 / 001499

Polyester resin with improved flexibility and formability prepared by reacting additionally polycarbonate diol after esterification.

Self healing polyester resin for coating material

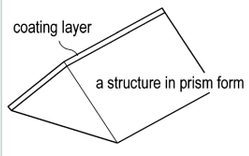
PCT / KR2011 / 001501

Polyester resin with improved elasticity and flexibility prepared by reacting polycarbonate diol after esterification using cyclohexane diol.

Optical fim with partially coated structure array for display device

PCT / KR2012 / 000387

Optical film with an array of structures on which a material having different refractive index, absorbancy or reflectivity from that of a surface of the structures is partially coated.

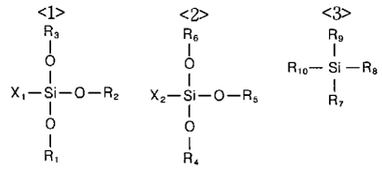


Chemistry/Material
Etc.

Resist for electron beam lithography

PCT / KR2009 / 005056

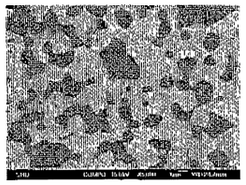
Resist for electron beam lithography, comprising copolymer of three compounds (formula 1 to 3) with a large functional group bonded to Si atom and M_n of 500 to 30,000.



Metal composite powder and sintered body thereof for high temperature structural materials

PCT / KR2009 / 005529

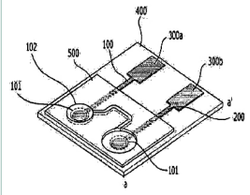
Composite powders of metals and carbides/carbonitrides for structural materials with matrix phase metals of W or Mo and accessory phase metals of groups IV to VI in the periodic table, having an average particle size ≤ 1 ㎛.



Reference electrode assembly for pH meter

PCT / KR2011 / 003573

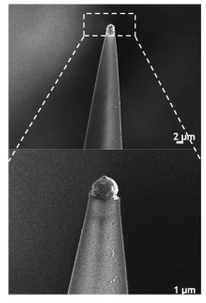
A reference electrode (100) assembly for detecting target substance in a sample by electrochemical method, comprising: porous transition metal electrode layer (101); and polyelectrolyte channel (102) disposed over the porous transition metal electrode layer.



Probe capable of acquiring electrochemical and spectroscopic informations.

PCT / KR2011 / 002130

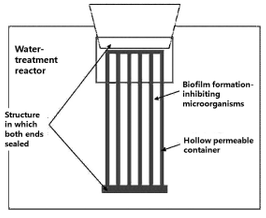
A probe capable of acquiring electrochemical and spectroscopic information, comprising: (i) conductive capillary with conductive coating on its inner wall; and (ii) metallic micro-shell of spherical template with a first metallic coating on its surface, trapped in one end of the conductive capillary.



A container with biofilm formation-inhibiting microorganisms immobilized therein for membrane water treatment

PCT / KR2011 / 007666

A permeable container with biofilm formation-inhibiting microorganisms immobilized therein for reducing membrane biofouling in membrane water treatment.



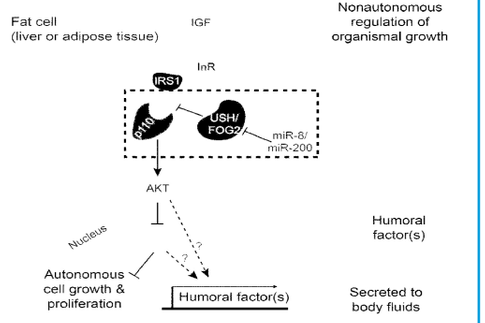
Biotechnology
Gene

MicroRNA regulating insulin signaling pathway

Core

PCT / KR2009 / 007161

The present invention relates to a miRNA regulating the insulin signaling pathway, and to a method for screening a material for controlling the action of a target gene thereof for promoting cell growth.

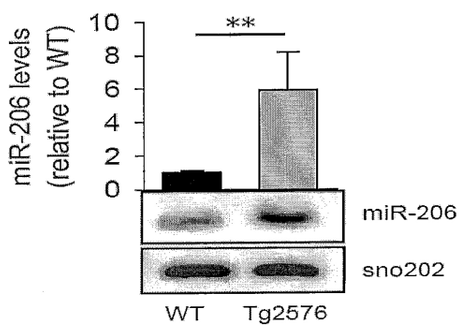


Treatment of neurodegenerative diseases by targeting miRNA

Core

PCT / KR2011 / 006718

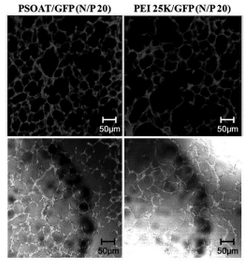
The antisense oligonucleotide of the present invention inhibits the function of miR-206 to greatly increase the levels of BDNF and IGF-1 and to increase the regeneration of synapses, thereby treating neurodegenerative diseases, particularly Alzheimer's disease.



Polysorbitol-based osmotically active transporter

PCT / KR2011 / 005955

The present invention relates to a biodegradable polysorbitol-based osmotically active transporter (PSOAT) and a method of gene therapy using the same as a gene delivery carrier.



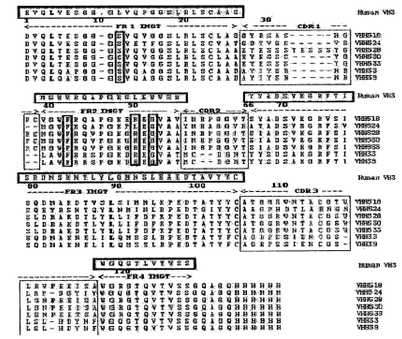
Biotechnology
Protein

Single domain antibody against MUC1

Core

PCT / KR2010 / 006295

The present invention relates to a single domain antibody (nanoscale antibody or NanoMAb) comprising CDRs of MUC1 for the treatment or dignosis of cancer.

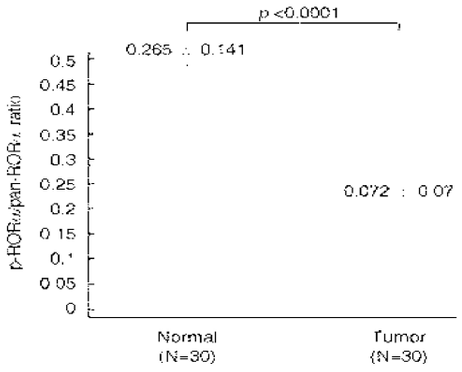


Anticancer peptide originating from RORα derivative

Core

PCT / KR2010 / 009358

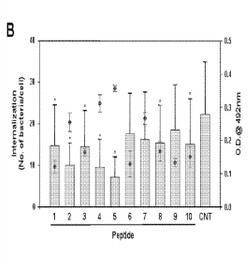
The present invention relates to an anticancer peptide originating from a RORα derivative. The anticancer peptide can be used to treat and prevent cancer, particularly prostate cancer and colorectal cancer.



Peptide compound for inhibiting infection or proliferation of Orientia tsutsugamushi

PCT / KR2010 / 005379

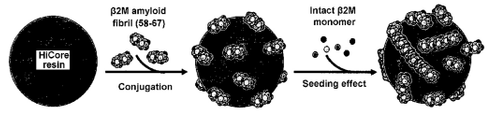
The present invention relates to a peptide compound which is prepared on the basis of a C-terminal sequence of TSA56 of Orientia tsutsugamushi, and a pharmaceutical composition for relieving scrub typhus using the same.



Seed-conjugated solid support resin for removing β2-microglobulin

PCT / KR2011 / 001909

The present invention relates to a method for removing β2-microglobulin (β2M) in blood at a neutral pH by using a fibril of a peptide having the 58th to 67th amino acid sequence of β2M.



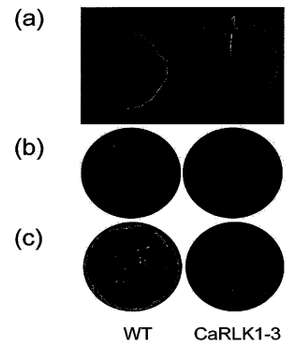
Biotechnology
Transformant

Gene which enhances resistance to plant pathogens

Core

PCT / KR2009 / 007186

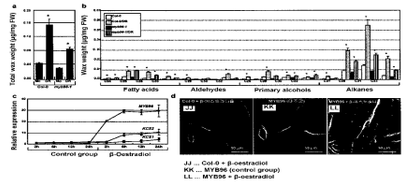
The present invention relates to a Capsicum annuum-derived CaRLK1 for enhancing resistance to plant pathogens.



Arabidopsis-thaliana-derived MYB96 gene

PCT / KR2011 / 000018

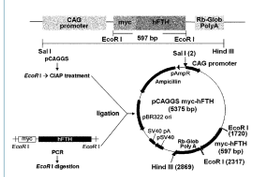
The present invention relates to a method for increasing biosynthesis of epicuticular wax of a plant through over-expression of MYB96 gene in a plant cell.



Transgenic mice expressing human ferritin

PCT / KR2011 / 004983

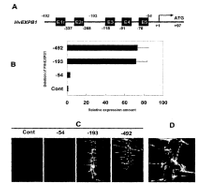
The present invention relates to a recombinant vector and to transgenic mice expressing human ferritin in a manner non-specific to tissue.



Root hair-specific expression promoter derived from EXPB1 gene of barley

PCT / KR2011 / 005563

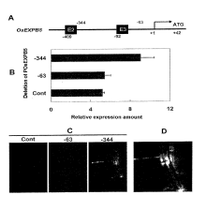
The present invention relates to a root hair-specific expression promoter derived from EXPB1 gene of barley and to a use thereof.



Root hair-specific expression promoter derived from EXPB5 gene of rice

PCT / KR2011 / 005565

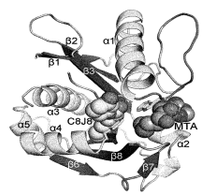
The present invention relates to a root hair-specific expression promoter derived from EXPB5 gene of rice and a use thereof.



TofI variant proteins and method for producing the same

PCT / KR2011 / 006797

The present invention discloses a TofI variant in which both the histidine (His) at position 91 and the proline (Pro) at position 92 are deleted from a wild-type TofI.



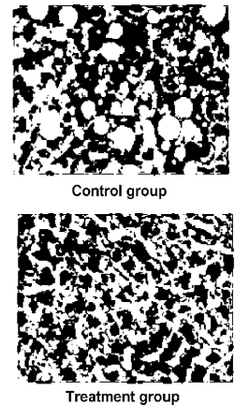
Biotechnology
Pharmaceutical Composition

Selenalzole derivative which activates peroxisome proliferator activated receptor (PPAR)

Core

PCT / KR2010 / 001204

The present invention relates to a new selenazole derivative which activates a peroxisome proliferator activated receptor (PPAR) for treatment of obesity, hyperlipedemia, fatty liver, arterosclerosis and diabetes mellitus.

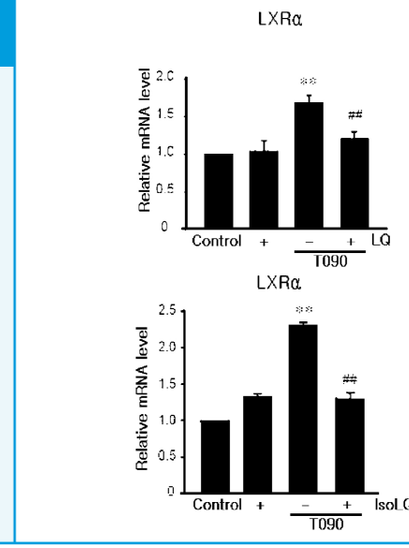


Composition for preventing or treating diseases caused by over-expression of LXRα

Core

PCT / KR2011 / 001150

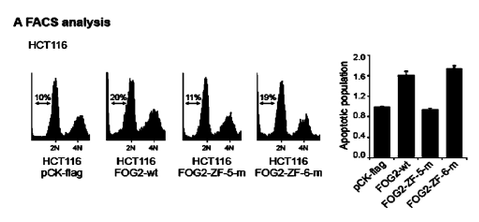
The present invention relates to a composition for preventing, relieving and treating diseases caused by expression or over-activation of LXRα or SREBP-1 such as fatty liver, hypertriglyceridemia, hyperreninemia, renin-induced hypertension, aldosteronism, adrenoleukodystrophy, glomerulosclerosis, proteinuria, renal failure, and the like.



Phosphatidylinositol 3-kinases activity regulator including fifth zinc finger domain of FOG2

PCT / KR2010 / 003667

The present invention relates to a phosphatidylinositol 3-kinase activity regulator comprising the fifth zinc finger domain of FOG2 capable of inducing cancer cells to die.

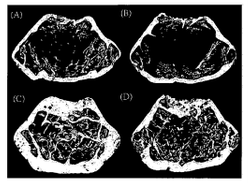


Biotechnology
Pharmaceutical Composition

Transdermal drug delivery system and pharmaceutical composition for preventing or treating bone diseases

PCT / KR2010 / 005890

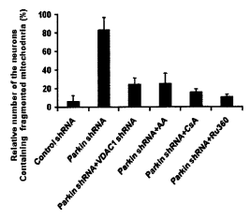
A transdermal drug delivery system comprising (i) a bisphosphonate-based drug and (ii) a cationic amine compound linked to the bisphosphonate-based drug via an ionic bond, and a pharmaceutical composition comprising the drug delivery system for preventing or treating a bone disease.



Method for treating Parkinson's disease through control of VDAC1 protein

PCT / KR2010 / 007052

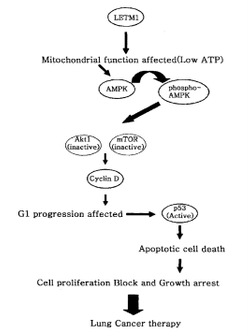
The present invention relates to a pharmaceutical composition for treating Parkinson's disease including a VDAC1 protein controller. The present invention is expected to be capable of providing a method for fundamentally treating Parkinson's disease by preventing abnormal mitochondrial function and/or restoring same.



Composition comprising LETM1 for preventing or treating cancer

PCT / KR2010 / 007547

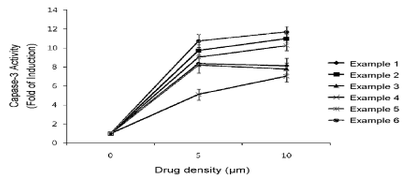
The present invention relates to a composition for preventing or treating cancer comprising LETM1 or a gene encoding the same, and the composition can be used as a successful therapeutic approach for inhibiting the proliferation and progression of cancer.



CDK-inhibiting pyrrolopyrimidinone carboxamide derivative for preventing or treating liver cancer

PCT / KR2010 / 007650

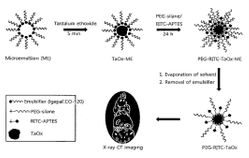
A CDK-inhibiting pyrrolopyrimidinone carboxamide derivative or a pharmaceutically acceptable salt thereof, and a pharmaceutical composition containing same as an active \ingredient for preventing or treating liver cell cancer.



Surface-modified tantalum oxide nanoparticles, and contrast medium for X-ray computed tomography

PCT / KR2011 / 001165

The present invention relates to surface-modified tantalum oxide nanoparticles and a contrast medium for X-ray computed tomography and a highly dielectric thin film using the same.



Composition comprising ajoene for preventing or treating disease caused by overexpression of LXR-alpha

PCT / KR2011 / 002094

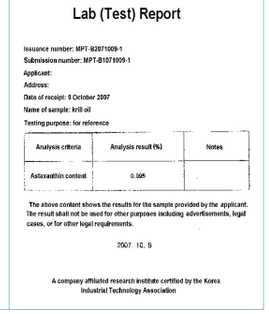
The present invention is related to a composition comprising the ajoene-abundant garlic extract or ajoene isolated therefrom for treating or preventing the disease caused by over-expression or hyper-activation of LXR-alpha or SREBP-1.

Biotechnology
Pharmaceutical Composition

Lipid emulsion having krill oil as a daily nutrient

PCT / KR2011 / 002096

Provided is a lipid emulsion having krill oil, and the lipid emulsion can be used independently for oral/ parenteral administration or as a daily nutrient.



Lab (Test) Report

Issuance number: MPT-B2071009-1
Submission number: MPT-B1071009-1
Applicant:
Address:
Date of receipt: 5 October 2007
Name of sample: krill oil
Testing purpose: for reference

Analysis criteria	Analysis result (%)	Notes
Astaxanthin content	0.005	

The above content shows the results for the sample provided by the applicant. The result shall not be used for other purposes including advertisements, legal cases, or for other legal requirements.

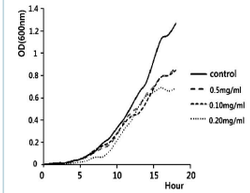
2007. 10. 9

A company affiliated research institute certified by the Korea Industrial Technology Association

Artificial saliva comprising hyaluronic acid

PCT / KR2011 / 002292

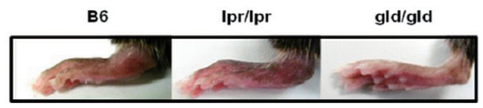
Provided is artificial saliva including hyaluronic acid (HA) useful for the treatment of xerostomia or oral candidiasis.



Regulator for chemokine expression

PCT / KR2011 / 002953

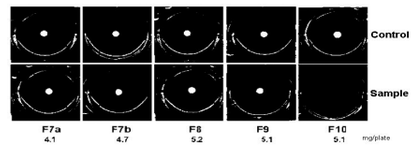
The present invention relates to a composition and method for suppressing the expression of chemokines using Fas ligand. The method can be used for controlling inflammatory responses.



Antifungal composition against Genus Ganoderma comprising cis-cyclo (L-Phe-L-Pro)

PCT / KR2011 / 004770

The present invention relates to antifungal composition showing excellent anti-fungal activity specifically to fungus of Genus Ganoderma



Serine-containing composition for prevention and treatment of fatty liver diseases

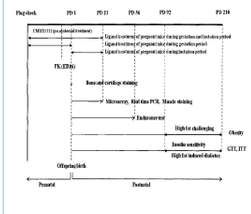
PCT / KR2011 / 005212

The present invention relates to a composition for the prevention and treatment of fatty liver diseases, comprising serine as an active ingredient.

Use of the fetal reprogramming of PPAR δ agonist

PCT / KR2011 / 006467

The PPAR δ agonist can be used in a pharmaceutical composition for enhancing the endurance of a human and an animal by embryonic/fetal reprogramming, preventing/ inhibiting metabolic diseases such as obesity, diabetes, arteriosclerosis and fatty liver, and enhancing memory.

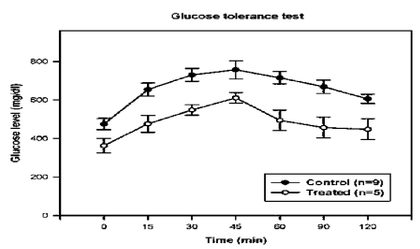


Biotechnology
Pharmaceutical Composition

Sesterterpene compounds for metabolic disease

PCT / KR2011 / 006638

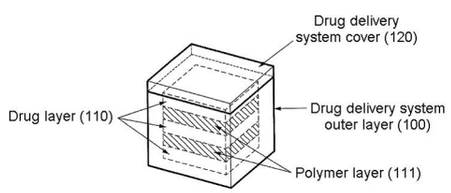
Sesterterpene compounds, to the precursors thereof that are hydrolysable in a living body, or to the pharmaceutically acceptable salts thereof, and also relates to the prevention and treatment efficacy of the sesterterpene compounds with respect to non-insulin dependent diabetes mellitus, diabetic complications, alcoholic, non-alcoholic, and viral fatty liver diseases, obesity, hyperlipidemia, atherosclerosis, \cardiovascular diseases, and cerebropathies.



Drug delivery system comprising layered-structure

PCT / KR2011 / 006945

The present invention relates to a drug delivery system to control the rate and amount of the released drug in a body comprising the layered-structure wherein drug layers and bio-degradable polymer layers are alternately layered.



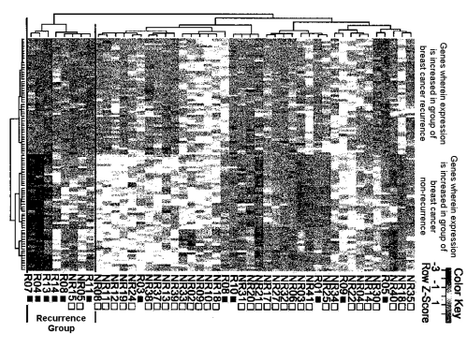
Biotechnology
Diagnosis / Analysis

Composition for predicting prognosis of breast cancer

Core

PCT / KR2011 / 002193

A composition for predicting the prognosis of breast cancer, containing a medicine for measuring the expression level of a marker gene for predicting the prognosis of breast cancer, a kit containing the composition for predicting the aprognosis of breast cancer, and a method for providing the information necessary for predicting prognosis including the chance of breast cancer recurrence by using the marker for predicting the prognosis of breast cancer.

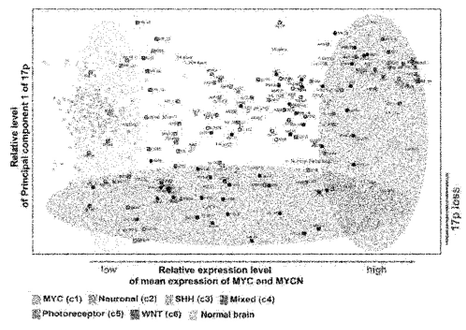


Composition for predicting chance of brain tumor recurrence and survival prognosis

Core

PCT / KR2011 / 002195

The present invention relates to a composition for predicting chance of brain tumor recurrence and survival prognosis, and can be effectively used to increase the survival rate of patients with brain tumor recurrence.



Polynucleotide for diagnosing sensitivity to stomach cancer

Core

PCT / KR2011 / 008313

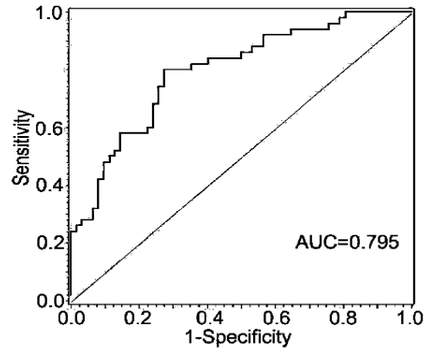
Apolynucleotide including a gene which is related to the metabolism of isoflavone, and especially a single-nucleotide polymorphism (SNP) that is induced from a gene which is on the signaling path of NF-κB, ERK, and AKT, or a reciprocal polynucleotide thereof as an indicative factor for diagnosing sensitivity to stomach cancer.

Method for diagnosing stomach cancer

Core

PCT / KR2011 / 008314

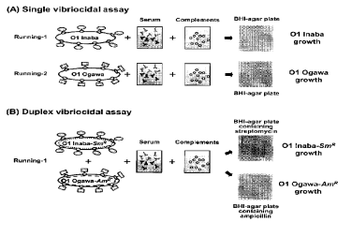
The present invention relates to a simple and effective method for diagnosing stomach cancer by measuring the level of soluble truncated c-Met protein in a biological sample.



Simultaneous measuring of vibriocidal serum antibody valence of combined vibrio vaccine

PCT / KR2009 / 007035

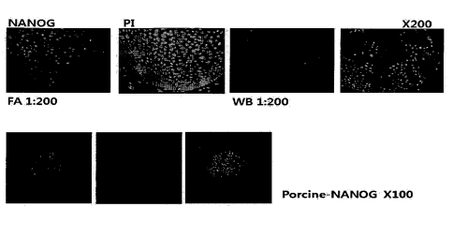
The present invention relates to a duplex vibriocidal assay capable of simultaneously measuring vibriocidal serum antibody titer with respect to each serotype when a combined Vibrio vaccine prepared by mixing two or more kinds of strains is evaluated after the combined vaccine is administrated.



Composition for analyzing pluripotency of pig stem cells

PCT / KR2010 / 008711

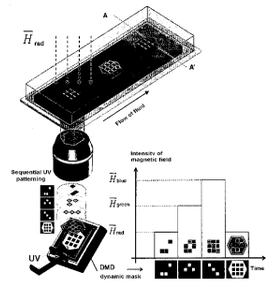
The present invention relates to a composition for analyzing the pluripotency of pig stem cells comprising an agent for measuring the expression level of pig NANOG protein.



Color-coded magnetic structure

PCT / KR2010 / 002249

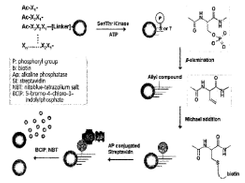
A color-coding method comprising the steps of: providing a composition containing a liquid medium, and magnetic nanoparticles distributed in the liquid medium; applying a magnetic field to the composition to align the magnetic nanoparticles; and radiating a patterned energy source to solidify the composition, wherein the intensity of the magnetic field varies to sequentially solidify various components of the composition and to fix a plurality of color codes.



Thiol derivative of biotin, and analysis method of substrate specificity of Ser/Thr kinase

PCT / KR2011 / 001855

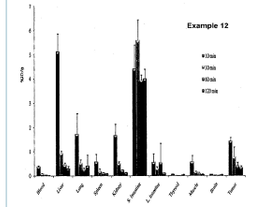
The present invention relates to a thiol derivative of biotin, and an analysis method of the substrate specificity of a serine/threonine kinase using the same.



Tricarbonyl Tc-99m or Re-188 labeled ring RGD derivative for angiogenesis-related diseases

PCT / KR2011 / 003801

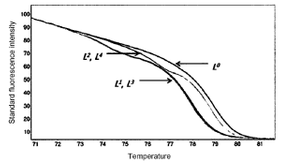
The tricarbonyl technetium-99m or rhenium-188 labeled ring RGD derivative has a high subnanomolar affinity to $\alpha v \beta 3$ integrin, and is useful as a medicine for the diagnosis or treatment of angiogenesis-related diseases.



Primer set for selecting PMMoV-resistant pepper varieties

PCT / KR2011 / 003833

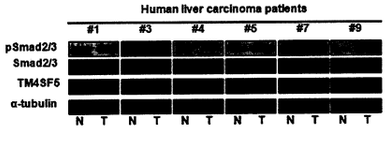
The present invention relates to an oligonucleotide primer set for selecting PMMoV-resistant pepper varieties, a method thereof, and a kit thereof.



Composition for diagnosing, treating and preventing liver disease

PCT / KR2011 / 005444

Liver disease diagnosis and substance screening through the measurement of TM4SF5 expression level, and liver disease prevention and/or treatment through the use of an antagonist for TM4SF5.

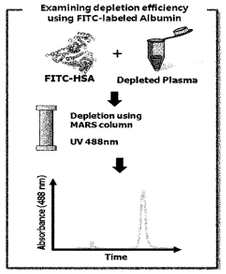


Biotechnology
Diagnosis / Analysis

Real-time monitoring of depletion of high-abundance blood proteins or recovery of low-abundance blood proteins

PCT / KR2011 / 005500

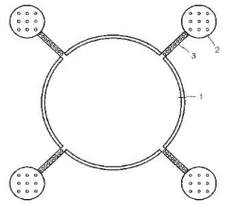
Disclosed is a method for monitoring depletion of high-abundance and/or recovery of low-abundance proteins from blood in real time.



Sensor for detecting target gene and method for analysis of mutation site

PCT / KR2012 / 000655

The present invention relates to a sensor for detecting a target virus and a genotype of the same, and for analysis of mutation site of the target virus at the same time.

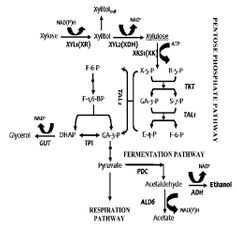


Biotechnology
Etc.

Ethanol production from xylose using recombinant *Saccharomyces cerevisiae*

PCT / KR2009 / 007458

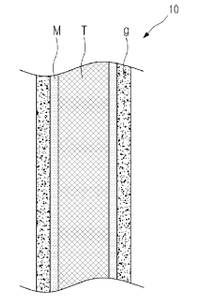
Disclosed is a method for producing ethanol at a high yield and high production efficiency from xylose using recombinant *Saccharomyces cerevisiae*.



Method for coating medical product with pharmaceutical substance

PCT / KR2010 / 000393

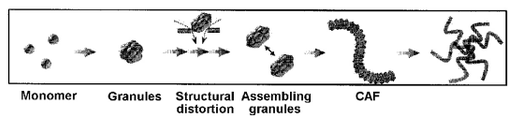
The present invention relates to a method for coating a medical product with a sticky gel-type pharmaceutical substance, which can be easily applied on a silk or polypropylene product.



Preparation method of curly amyloid fibrils derived from alpha-synuclein

PCT / KR2010 / 003025

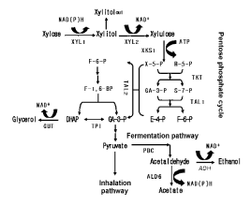
A preparation method of amyloid fibrils derived from alpha-synuclein, and a method using the same.



Ethanol production from xylose using recombinant *Saccharomyces cerevisiae*

PCT / KR2010 / 008078

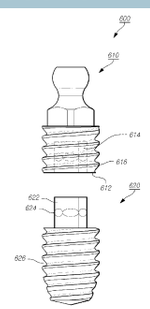
The present invention relates to a method for producing ethanol from xylose using recombinant *Saccharomyces cerevisiae* resulting in an improved production yield and productivity.



Absorbable material, and implant fixture and implant using same

PCT / KR2010 / 008690

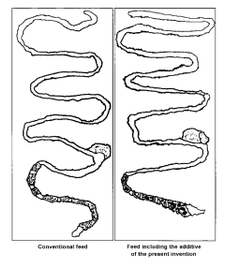
The present invention relates to a nano-hybrid material, an implant fixture and an absorbable implant ncluding same wherein an inorganic nanoparticle substance is dispersed in an organic substance and bonded to the organic substance.



Feed additive including fermented silicate mineral for replacing antibiotics

PCT / KR2011 / 004618

The present invention provides a method for producing a purified silicate mineral as a feed additive that emanates quantum energy, and an animal feed including the same.

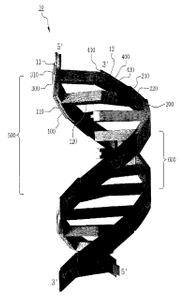


Biotechnology
Etc.

DNA double helical structure model

PCT / KR2011 / 005146

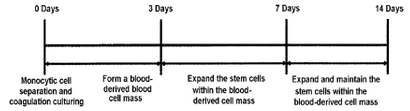
A DNA double helical structure model of the present invention comprises a plurality of nucleotide members capable of being coupled to or being separated from each other.



Blood cell mass assay using cell coagulation, and blood adult stem cells

PCT / KR2011 / 005762

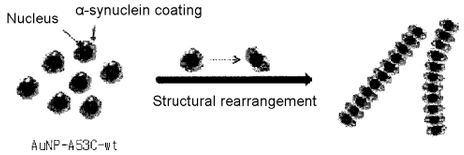
The present invention relates to a method for expanding adult stem cells and progenitor cells in blood by inducing human blood-derived blood cell mass using cell coagulation, which is a technique of using monocytic blood cells to effectively culture and proliferate adult stem cells and progenitor cells.



Conductive bio-nano fusion chain and method for preparing same

PCT / KR2011 / 007119

A multifunctional photoconductive bio-nano fusion chain, which is formed by linearly arranging a conductive nanoparticle chain in a non-conductrive alpha-synuclein amyloid fibrilsand a method for preparing same.



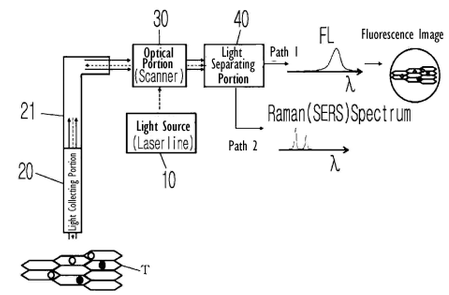
Machinery
Medical Equipment

Method for simultaneously detecting fluorescence / raman signals and medical imaging device using the same

Core

PCT / KR2011 / 005915

A method for simultaneously detecting fluorescence/raman signals and a medical imaging device using the method



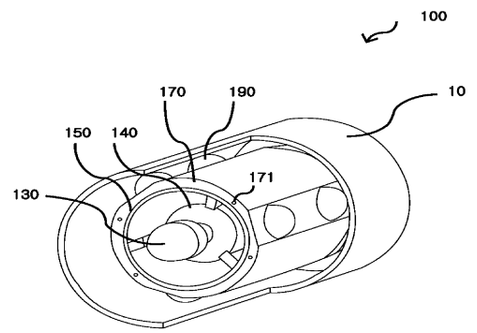
Robot for removing impurities by moving inside a pipe / Mobile robot capable of being immersed in a fluid

Core

PCT / KR2010 / 003372
PCT / KR2011 / 002820

A robot capable of removing impurities by moving inside a pipe

A mobile robot which can be immersed in a fluid without interrupting a flow of the fluid



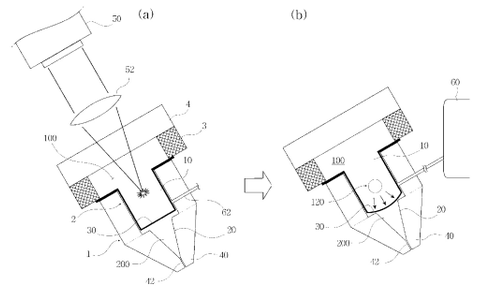
Drug delivery system

Core

PCT / KR2010 / 003603
PCT / KR2011 / 001834

A microjet drug delivery system for microjet spraying a drug solution using gas bubbles

A microjet drug delivery system that injects by microjet spraying a drug solution

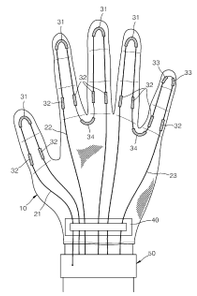


Machinery
Medical Equipment

Glove-type wearable robot

PCT / KR2010 / 007168

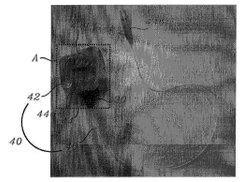
A glove-type wearable robot which moves the fingers of a user through the exoskeleton structure thereof



Amniotic fluid collector

PCT / KR2011 / 002348

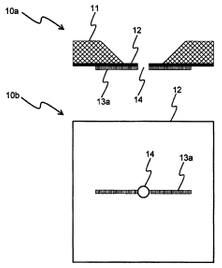
An amniotic fluid collector which is configured to be inserted and positioned inside the uterus of a pregnant woman



Nanofluidic fluorescence apertureless near-field scanning optical microscope

PCT / KR2011 / 003008

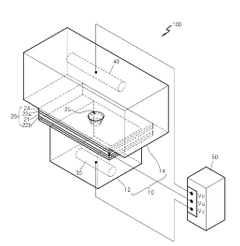
A fluorescence apertureless near-field scanning optical microscope which is capable of focusing outputs of fluorescence signals to a specific direction



DNA analysis device and PCR quantitative detecting device

PCT / KR2011 / 004653

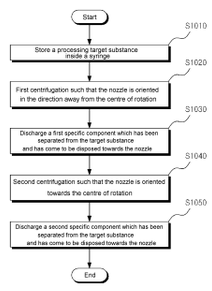
DNA analysis device/method/PCR Quantitative detecting device using nanopore structure



Centrifugation method/device

PCT / KR2011 / 007556

A Centrifugation method/device capable of first/second centrifugation using a single syringe

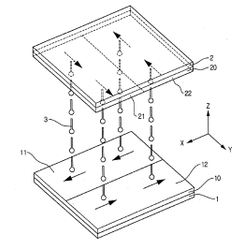


Machinery
Etc.

Method for manufacturing substrate for alignment of liquid crystal

PCT / KR2010 / 005116

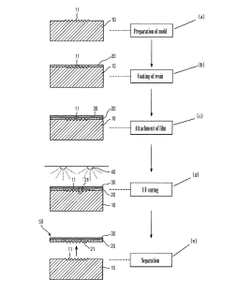
A method for manufacturing substrate for alignment of liquid crystal ensuring wide viewing angle and alignment stabilit



Film type soft stamper

PCT / KR2011 / 001589

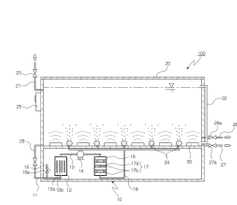
A film type soft stamper comprising a soft film and a pattern molding layer



Water treatment device using fine bubble generating device

PCT / KR2011 / 003920

A water treatment device exhausting a fine bubble with a positive charge

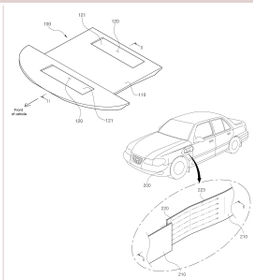


Vehicle undercover / Exhaust structure of engine room for vehicle

PCT / KR2011 / 009544
PCT / KR2011 / 009545

A vehicle undercover forming an air exhaust aperture along an air flow direction

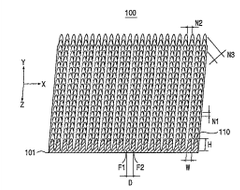
An exhaust structure for vehicles forming an air exhaust aperture along an air flow direction



Metallic microstructure and processing method thereof

PCT / KR2012 / 001021

A method for processing metallic structure which melts and re-coagulates a dross repeatedly by laser processing



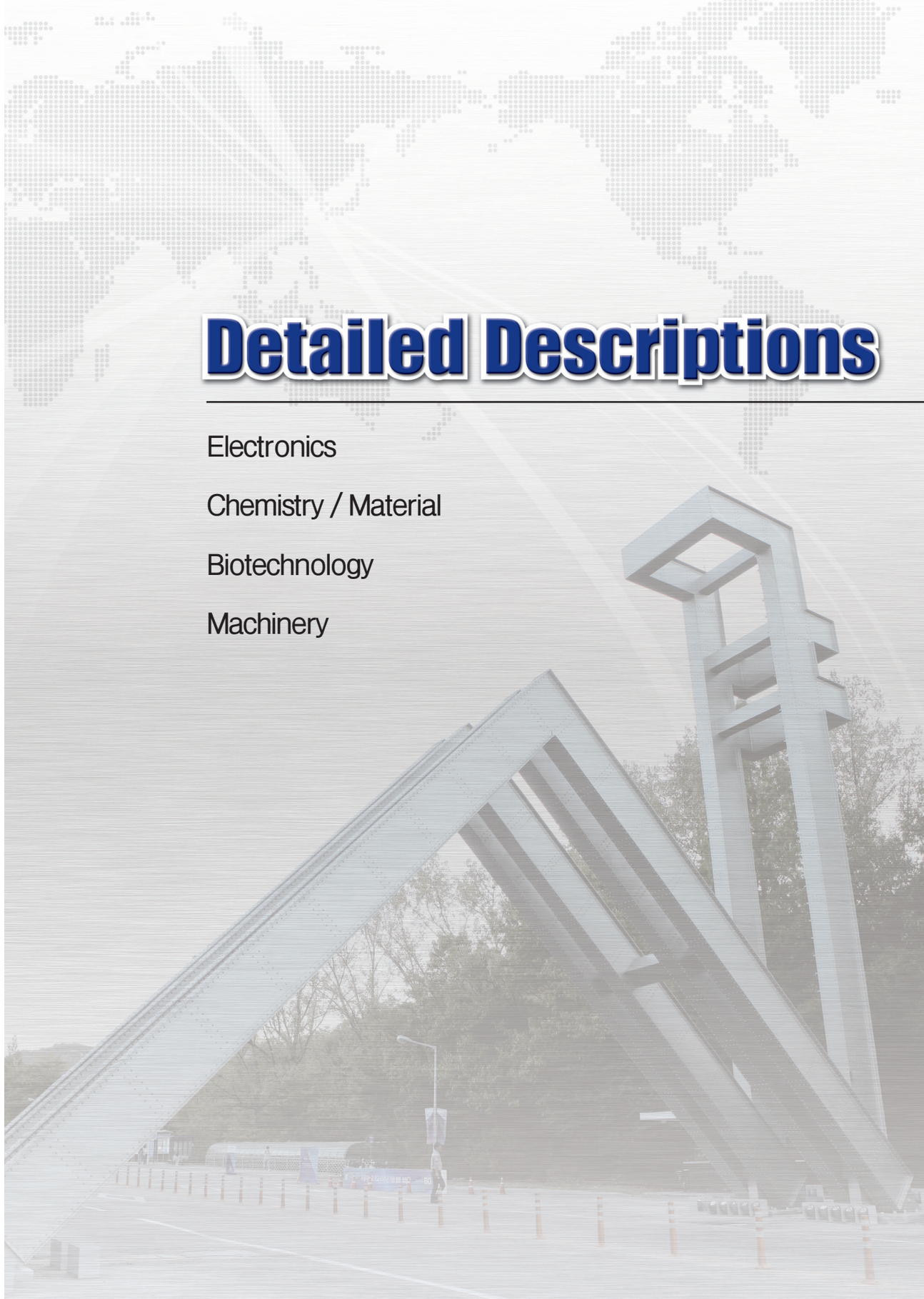
Detailed Descriptions

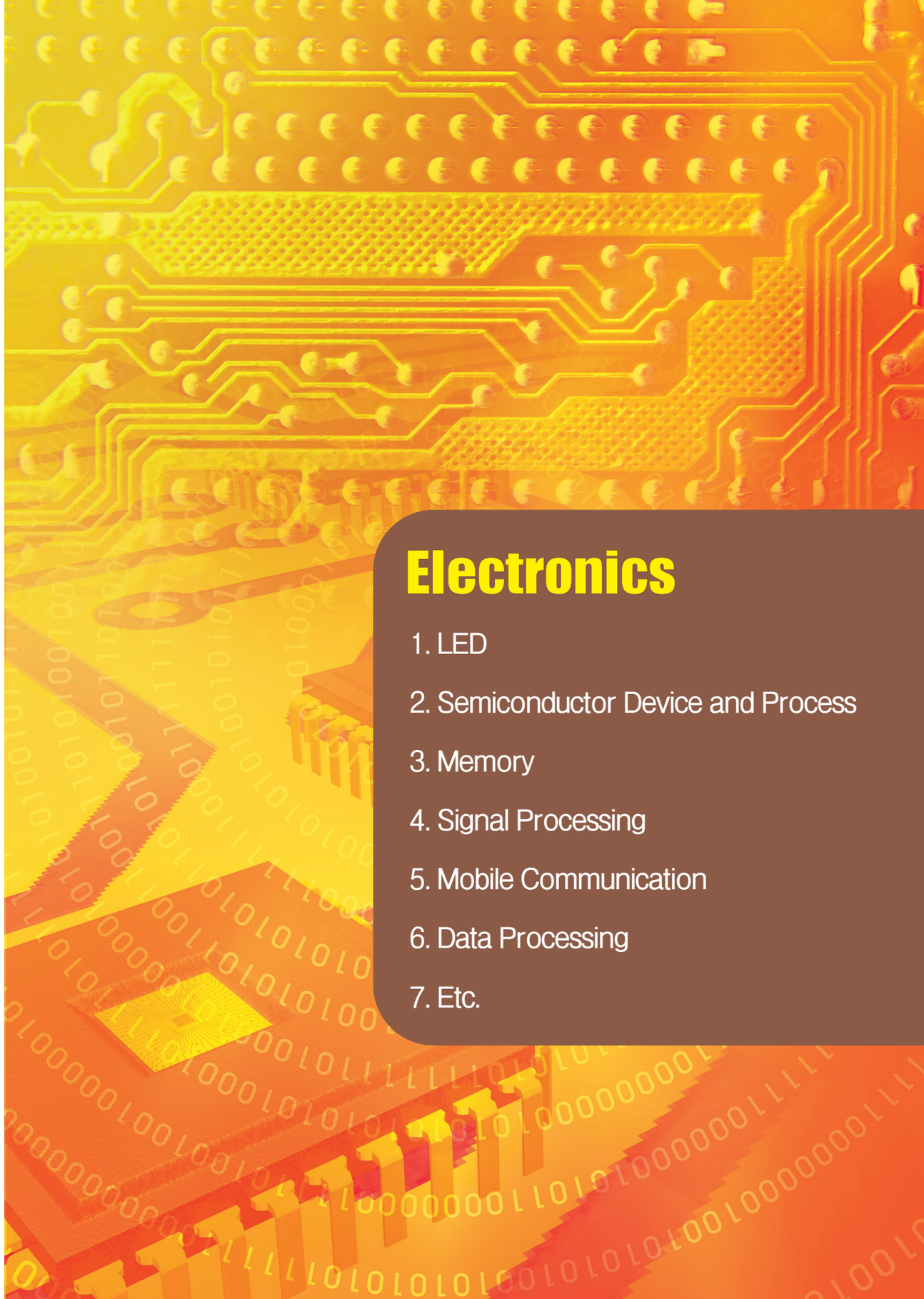
Electronics

Chemistry / Material

Biotechnology

Machinery

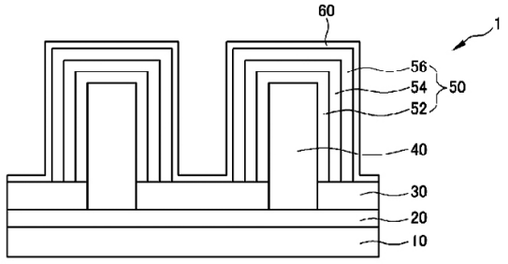



Electronics
1. LED
2. Semiconductor Device and Process
3. Memory
4. Signal Processing
5. Mobile Communication
6. Data Processing
7. Etc.

LED

Appl. No. (Date)	PCT / KR2011 / 007460 (2011-10-7) Core
Pub. No.	WO2012 / 047068
Title of the invention	Light-emitting element and method for manufacturing same
Inventors	YI, Gyu-Chul | LEE, Chul-ho | KIM, Yong-Jin
Gist of the invention	A light-emitting element, which is formed using a fine structure grown toward the upper side of a graphene

Figure

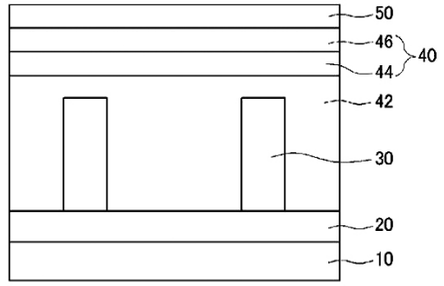


Claim 1	A light-emitting element comprising: a carbon layer comprising a graphene; a plurality of fine structures having grown toward the upper side of the carbon layer; and a light-emitting structure layer formed on a surface of the fine structures.
Related US patents	US20110210314A

LED

Appl. No. (Date)	PCT / KR2011 / 007461 (2011-10-7)
Pub. No.	WO2012 / 047069
Title of the invention	Light-emitting element and method for manufacturing same
Inventors	YI, Gyu-Chul | CHUNG, Kun-Ook | LEE, Chul-ho
Gist of the invention	A light-emitting element, which is formed using a fine structure grown toward the upper side of a graphene, wherein a thin film layer is formed between the fine structure and the light-emitting element.

Figure

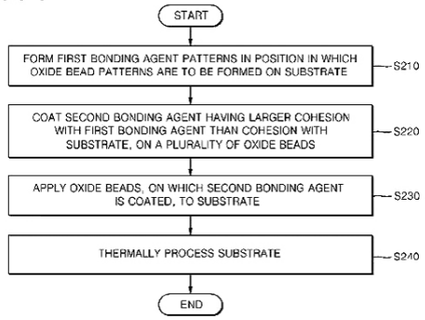


Claim 1	A light-emitting element comprising: a carbon layer comprising a graphene; a plurality of fine structures having grown toward the upper side of the carbon layer; a thin film layer for coating the fine structures; and a light-emitting structure layer formed on the thin film layer.
Related US patents	US20110210314A

Appl. No. (Date)	**PCT / KR2009 / 002154** (2009-04-24)
Pub. No.	WO2010 / 123165
Title of the invention	Method of fabricating a substrate where patterns are formed
Inventors	YOON, Eui-Joon | KWON, Sung-Hoon
Gist of the invention	A method of fabricating a substrate where patterns are formed, a plurality of low-priced oxide beads can be patterned on a substrate to have a desired shape so that damages can be prevented from occurring in the substrate during dry etching.

Figure

[Fig. 3]

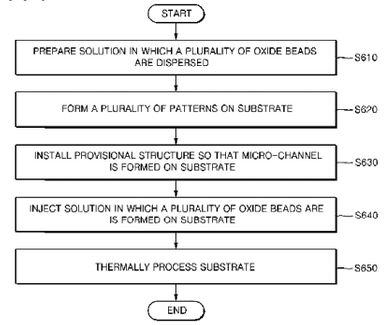


Claim 1	A method of fabricating a substrate where patterns are formed, the method comprising: forming first bonding agent patterns having selective cohesion in a position in which oxide bead patterns are to be formed on a substrate; coating a second bonding agent having larger cohesion with the first bonding agent than cohesion with the substrate, on a plurality of oxide beads, applying the oxide beads, on which the second bonding agent is coated, to the substrate and forming the oxide beads, on which the second bonding agent is coated, on the first bonding agent patterns; and thermally processing the substrate.
Related US patents	US20110221431A | US7799677B | US6694504B

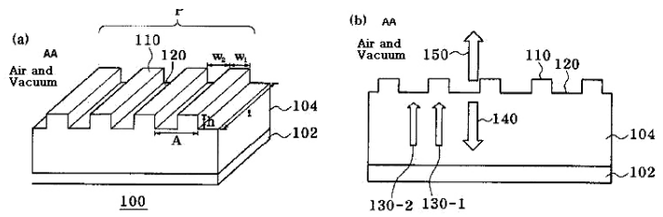
Appl. No. (Date)	**PCT / KR2009 / 002253** (2009-04-29)
Pub. No.	WO2010 / 126177
Title of the invention	Method of fabricating a substrate where patterns are formed
Inventors	YOON, Eui-Joon | KWON, Sung-Hoon
Gist of the invention	A method of fabricating a substrate where patterns are formed, a plurality of low-priced oxide beads can be patterned on a substrate to have a desired shape so that damages can be prevented from occurring in the substrate during dry etching.

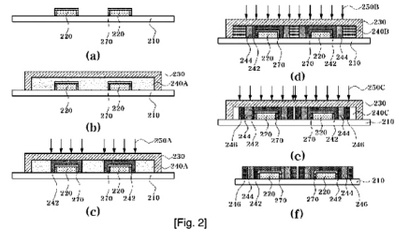
Figure

[Fig. 3]



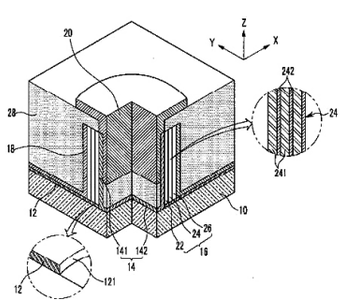
Claim 1	A method of fabricating a substrate where patterns are formed, the method comprising: preparing a solution in which a plurality of oxide beads are dispersed; forming patterns on a substrate; installing a provisional structure in an upper portion of the substrate so that a micro-channel is formed on the substrate; injecting the solution in which the oxide beads are dispersed, into the micro-channel and fixing the oxide beads at the substrate; and thermally processing the substrate.
Related US patents	US20110221431A | US7799677B | US6694504B

Appl. No. (Date)	**PCT / KR2009 / 005996** (2009-10-16)
Pub. No.	WO2011 / 046244
Title of the invention	III-nitride surface grating reflector
Inventors	JEON, Heoun-Su | LEE, Joon-Hee | AHN, Sung-Mo | JANG, Ho-Jun
Gist of the invention	A III-nitride surface grating reflector, among the lights incident from the inside of the III-nitride layer, lights cause destructive interference whereby the incident lights are reflected on a surface of the structure of the grating pattern.
Figure	
Claim 1	A III-nitride surface grating reflector comprises: a substrate; and a III-nitride layer which is disposed on one side of the substrate, wherein the structure of a one-dimensional diffracting grating pattern is disposed on a surface of the II-nitride layer, wherein the grating pattern has an uneven cross section on which crests and troughs are arranged periodically, and among the lights incident from the inside of the III-nitride layer, a first light that passes through the crests and the second light that passes through the troughs mutually cause destructive interference whereby the incident lights are reflected on the surface of the structure of the grating pattern.
Related US patents	US20110156214A | US20100163912A, US20090078989A | US7977664B | US7964483B | US7888694B

Appl. No. (Date)	**PCT / KR2010 / 001893** (2010-03-29)
Pub. No.	WO2010 / 114260
Title of the invention	Method for coating light-emitting devices, light coupler, and method for manufacturing the light coupler
Inventors	KWON, Sung-Hoon | CHUNG, Su-Eun
Gist of the invention	A method for coating light-emitting devices, appling uniformly phosphor on the surface of the light-emitting device.
Figure	 [Fig. 2]
Claim 1	A method of coating a light emitting device comprising: (a) preparing a plurality of light emitting devices; (b) coating the plurality of light emitting devices with a first photocurable liquid; (c) selectively exposing first light to the first photocurable liquid to form a first coating layer on at least a partial region of a surface of each of the plurality of light emitting devices, wherein the first coating layer is the cured first photocurable liquid; (d) coating the plurality of light emitting devices, on which the first coating layer is formed, with a second photocurable liquid; and (e) selectively exposing second light to the second photocurable liquid to form a second coating layer on at least a partial region of the surface of each of the plurality of light emitting devices or a surface of the first coating layer, wherein the second coating layer is the cured second photocurable liquid.
Related US patents	US20120032200A

Appl. No. (Date)	**PCT / KR2010 / 003143** (2010-05-18)
Pub. No.	WO2010 / 134747
Title of the invention	Light-emitting device and production method therefor
Inventors	YI, Gyu-Chul | LEE, Chul-ho
Gist of the invention	A light-emitting device, which is producted using nano structures formed in a direction perpendicular to the planar surface of a basic plate.

Figure

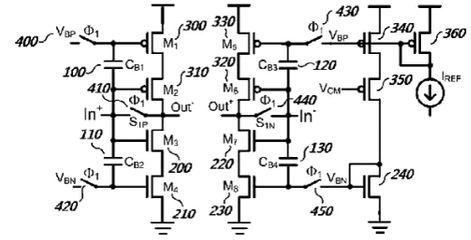


Claim 1	A light emission device comprising: a substrate; a light emission structure provided on the substrate and extended substantially perpendicular to a surface of the substrate; a first electrode provided on the substrate while surface-contacting the external surface of the light emission structure; and a second electrode disposed in the light emission structure and surface-contacting the internal surface of the light emission structure.
Related US patents	US20110266577A

Appl. No. (Date)	**PCT / KR2010 / 003516** (2010-06-01)
Pub. No.	WO2011 / 139000
Title of the invention	Dynamic bias current-starved inverter and low-power delta-sigma modulator using the inverter
Inventors	JEONG, Deog-Kyoon | LEE, Sang-Yoon | LIM, Dong-Hyuk | CHOI, Woo-Seok
Gist of the invention	Dynamic bias current-starved inverter(DSINV) circuit which secures a broad bandwidth on dynamic operating mode, minimizes power waste and output error, and achieve a high gain by the circuit provided in the invention.

[Fig. 9]

Figure



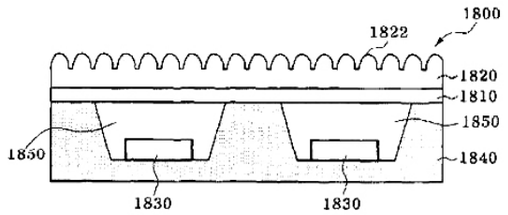
Claim 1	An inverter circuit comprising: a first PMOS transistor and a second PMOS transistor cascade-connected, a first NMOS transistor and a second NMOS transistor cascade-connected, each of drains of second PMOS transistor and the second NMOS transistor are connected tooutput, and each of gates of the second PMOS transistor and the second NMOS transistor are connected to input, a first bootstrap capacitor is provided between the gate of the first PMOS transistor and the gate of the second PMOS transistor, a second bootstrap capacitor is provided between the gate of the first NMOS transistor and the gate of the second NMOS transistor,a first switch is provided to on/off the connection with a first reference potential on the gate of the first PMOS transistor; a second switch is provided between the input and the ouput; and a third switch is provided to on/off the connection with a second reference potential on the gate of the first NMOS transistor.

LED

Appl. No. (Date)	**PCT / KR2010 / 006580** (2010-09-28)
Pub. No.	WO2011 / 037436
Title of the invention	Composite film for use in a light-emitting device, lignt-emitting device, and method for producing the composite film
Inventors	KWON, Sung-Hoon | CHUNG, Su-Eun | LEE, Seung-Ah | JANG, Ji-Sung | HAN, Sang-Kwaon
Gist of the invention	A composite film to be used in a LED device comprising a light-emitting element and the composite film comprising phosphor and an optical plate achieves improving yield rate.

Figure

[Fig. 18]



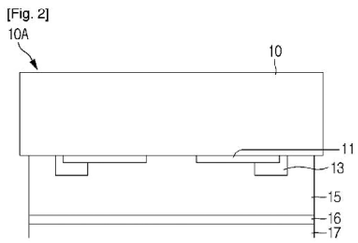
Claim 1	A composite film comprises: a fluorescent film including a phosphor; and an optical plate arranged on the fluorescent film to diffuse, contract, or mix light emitted by the light-emitting element, light emitted by the phosphor, and/or a mixture of said light.
Related US patents	US7468226B | US6800511B | US20070292987A

LED

Appl. No. (Date)	**PCT / KR2010 / 006608** (2010-09-29)
Pub. No.	WO2011 / 136443
Title of the invention	Plasma display panel having a diffusion barrier
Inventors	HWANG, Ki-Woong
Gist of the invention	Plasma display panel having a diffusion barrier and by preventing the diffusion of impurities, discharging is stabilized during an initial period of aging, the plasma display panel can be driven at a low voltage, and the discharging efficiency of the plasma display panel can be improved.

Figure

[Fig. 2]



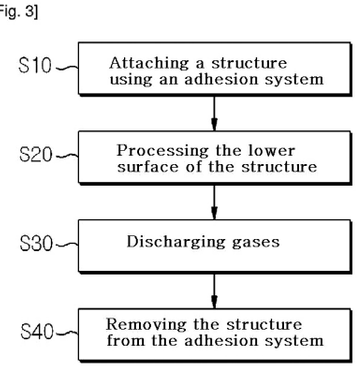
Claim 1	A plasma display panel having a diffusion barrier, comprising: a front substrate which is bonded together with a rear substrate to constitute a plasma display panel, a transparent electrode, a bus electrode, a dielectric layer, and a protective layer are sequentially formed on a surface of the rear substrate which is arranged opposite a front substrate, and a diffusion barrier is additionally disposed between the dielectric layer and the protective layer so as to prevent impurities from the front substrate or dielectrics from diffusing into the protective layer.
Related US patents	US6870371B

LED

Appl. No. (Date)	**PCT / KR2011 / 000765** (2011-02-07)
Pub. No.	WO2011 / 096754
Title of the invention	Bottom-up processing of a structure using an adhesion system having fine ciliary
Inventors	KWAK, Moon-Kyu | SUH, Kahp-Yang | JEONG, Hoon-Eui
Gist of the invention	A method and apparatus for bottom-up processing of a structure using an adhesion system having fine ciliary, which enable the structure to be significantly conveniently attached/detached, and which support the structure in a stable and firm manner.

Figure

[Fig. 3]

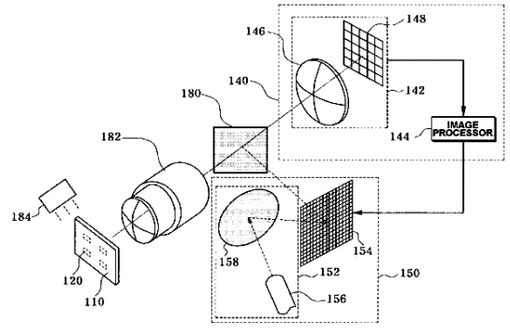


Claim 1	A method for bottom-up processing of a structure using an adhesion system having fine ciliary, wherein the method comprises: a step of attaching an upper surface of the structure using the adhesion system having fine ciliary; and a step of processing a bottom surface of the structure from the bottom to the top of the structure.
Related US patents	US7517654B | US20100055562A | US7545043B

Semiconductor device and Process

Appl. No. (Date)	**PCT / KR2010 / 006602** (2010-09-29) Core
Pub. No.	WO2011 / 040745
Title of the invention	Image processing-based lithography system and target object coating method
Inventors	KWON, Sunghoon | CHUNG, Sueun | LEE, Seungah | JANG, Jisung | HAN, Sangkwon
Gist of the invention	A lithography system providing a new process which has cost efficiency, a high processing speed and a high productivity.

Figure



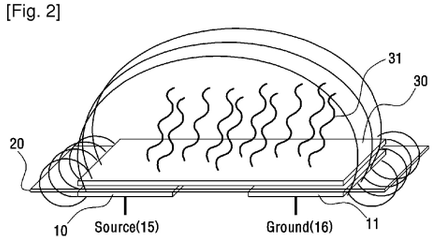
Claim 1	A lithography system, comprising: at least one target object which is disposed on a substrate; a processor which determines optical patterns for coating layers of the at least one target object by performing the image processing for the at least one target object; and an exposure device which provides the light having the optical patterns determined by the processor to the substrate.
Related US patents	US7359598B | US20100060875A

Semiconductor device and Process

Appl. No. (Date)	**PCT / KR2010 / 002883** (2010-05-06)
Pub. No.	WO2011 / 138985
Title of the invention	Capacitive element sensor and method for manufacturing same
Inventors	LEE, Jung Hoon | CHOI, Jun Kyu | LEE, Su Jin | LEE, Sung Jun
Gist of the invention	The present invention provides a simple manufacturing process, so that it is possible to reduce production cost and to improve the reliability of the measure.

Figure

[Fig. 2]



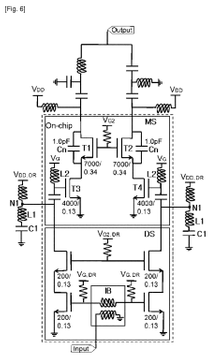
Claim 1	A method for producing the capacity element sensor measuring a variation of capacitance element based on a first and a second electrode, which is varied due to biomolecular electrical charge attached to a third electrode, wherein the capacitance element sensor including the first electrode, the second electrode and the third electrode is offered by dielectric isolation, wherein the method comprises: a first step, forming the first electrode and the second electrode spaced a certain distance on a substrate; a second step, forming a dielectric layer on an upper side of the first and the second electrode; a third step, forming the third electrode on an upper side of the dielectric layer; and a forth step, implementing surface treatment in order to attach the particular biomolecule on an upper side of the third electrode.
Related US patents	US8149187B | US20080291351A

Semiconductor device and Process

Appl. No. (Date)	**PCT / KR2010 / 008977** (2010-12-15)
Pub. No.	WO2011 / 074873
Title of the invention	Class E power amplifier
Inventors	NAM, Sang Wook | SONG, Yong Hoon | LEE, Sung Ho | LEE, Jae Jun | CHO, Eun Il
Gist of the invention	A class E power amplifier which reduces voltage stress applied to a CMOS transistor, forms a higher load impedance and minimizes interference to other circuits in operation.

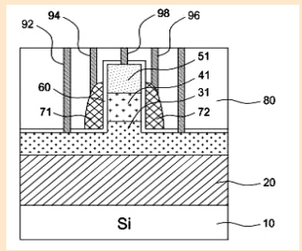
Figure

[Fig. 6]

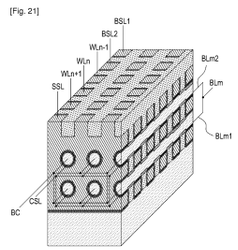


Claim 1	A class E power amplifier comprising: a main stage which comprises a first power amplifier implemented by a transistor; a driver stage which comprises a second power amplifier implemented by a transistor, and in which an output terminal of the driver stage is connected to an input terminal of the main stage and wherein an input signal is inputted to the second power amplifier; a first LC resonator which has one terminal connected to the output terminal of the driver stage and another terminal connected to a ground so as to make AC circuit equivalent; and a second LC resonator which has one terminal connected to the input terminal of the main stage and another terminal connected to a ground so as to make AC circuit equivalent.
Related US patents	US7884667B

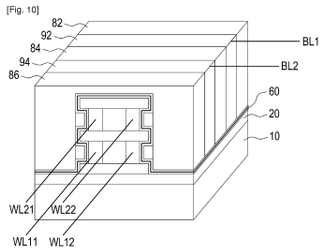
Semiconductor device and Process

Appl. No. (Date)	**PCT / US2011 / 068064** (2011-12-30)
Title of the invention	Compound tunneling field effect transistor integrated on silicon substrate and method for fabricating the same
Inventors	Park Byung Guk | Cho Sung Jae | Kang In Man
Gist of the invention	The present invention provides compound tunneling field effect transistors integrated on a silicon substrate and methods for fabricating the same for simultaneously forming peripheral circuit in optical device fabrication process on a silicon substrate, wherein the method shifts easily the threshold voltage of each device.
Figure	
Claim 1	A compound tunneling field effect transistor comprising: a silicon substrate; a source region formed of a first semiconductor material having a lattice constant difference with silicon 5% or less, a bandgap 5 at least 0.4 electron volts (eV) narrower than that of silicon and a first conductive type on the silicon substrate; a channel region formed of a second semiconductor material having a lattice constant difference with the first semiconductor material 2% or less, a bandgap wider than that of the first semiconductor material and electron mobility at least 5 times higher than that of silicon on the 10 source region; a drain region formed of a third semiconductor material having a lattice constant difference with the second semiconductor material 1% or less, a bandgap wider than or equal to that of the second semiconductor material and a second conductive type opposite to the first conductive type on the channel region; a gate dielectric layer formed on a sidewall of the channelregion; and a gate electrode formed on the gate dielectric layer, wherein a vertical channel is further included.
Related US patents	US7906814B | US20110121396A | US6800511B

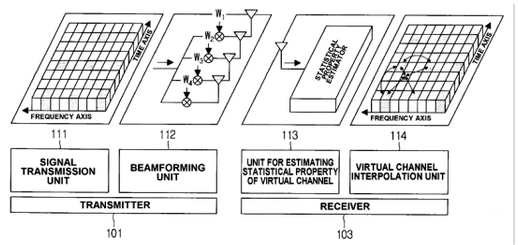
Memory

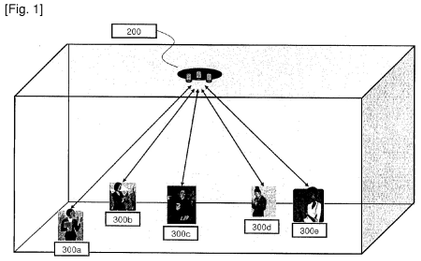
Appl. No. (Date)	**PCT / KR2009 / 007663** (2009-12-22) Core
Pub. No.	WO2011 / 004945
Title of the invention	Semiconductor device having stacked array structure, nand flash memory array using same and manufacturing method therefor
Inventors	PARK, Byung Gook | YUN, Jang Gn | PARK, Il Han
Gist of the invention	A semiconductor device having a stacked array structure, which has gate all around(GAA) structure, so that control of gate for each channel has the effect of improved.
Figure	
Claim 1	A semiconductor device having a stacked array structure, comprising: one or more semiconductor layers stacked and spaced vertically a certain distance on a substrate; a gate formed through passing all of the semiconductor layers in between gate insulator films and on each of the semiconductor layers; a source and drain formed on both sides of the gate in each of the semiconductor layers; and an interlayer insulator film surrounding the source and drain in each of the semiconductor layers or filled in empty space surrounding each of the semiconductor layers.
Related US patents	US20090230461A | US7995390B | US20110256680A | US20120058619A | US7302762B | US20100290281A | US20110198687A | US8030699B | US8023318B | US7863643B | US7960778B | US7872297B | US7005700B | US7498632B | US20110241098A | US8035157B | US20100038698A | US20110254076A | US20100207220A

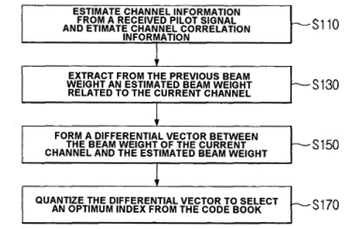
Memory

Appl. No. (Date)	**PCT / KR2010 / 000704** (2010-02-05)
Pub. No.	WO2011 / 096601
Title of the invention	Stacked nor flash memory array and method of manufacturing same
Inventors	PARK, Byung Gook | YUN, Jang Gn
Gist of the invention	A stacked NOR flash memory array and a method of manufacturing same, which enables memory capacity to be increased by as much as necessary through vertical stacking.
Figure	
Claim 1	A stacked NOR flash memory array comprising: a plurality of word lines, stacked and spaced vertically a certain distance on a board; a plurality of semiconductor layers forming source/drain repetitively and channel region in the direction of word lines, on both side of an insulator film having electrets lined up horizontally in one side of each of the word lines; a plurality of interlayer insulator films formed on upper and lower sides of each of the word lines and each of the semiconductor layers lined up horizontally with each word line; and a plurality of bit line formed across with each of the word lines and passing through at least one among the plurality of interlayer insulator films and having a connecting plug in order to adjoining up and down the source/drain in each of the semiconductor layers.
Related US patents	US8030699B | US20110198687A | US7302762B | US20100290281A | US8023318B | US7863643B | US7960778B | US7872297B | US7005700B | US7498632B | US20110241098A | US8035157B | US20100038698A | US20110254076A | US20100207220A

Signal Processing

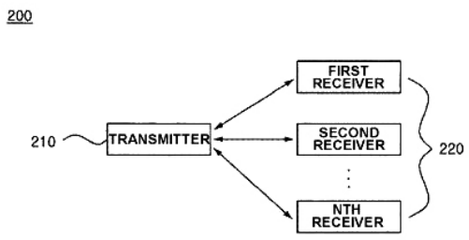
Appl. No. (Date)	**PCT / KR2010 / 008401** (2010-11-25) Core
Pub. No.	WO2011 / 065764
Title of the invention	Method and apparatus for estimating channel using dedicated pilot signal in OFDM-based wireless communication system
Inventors	LEE, Yong-Hwan | PARK, Han-Jun | LEE, Keon-Wook
Gist of the invention	A method for estimating a channel using a dedicated pilot signal in an OFDM-based wireless communication system using a transmission beamforming technique and a multi- antenna transmission technique, which can minimize channel estimation errors and can maximize a throughput of a system by adaptively determining an optimum dedicated pilot pattern according to the environment through a relationship analysis between a pilot signaling overhead and a channel estimation error, and can obtain large gains in the incorrect channel estimation environment.
Figure	
Claim 1	A method for estimating a channel using a dedicated pilot signal in an OFDM-based wireless communication system using a transmission beamforming technique and a multi- antenna transmission technique, wherein the method comprises: estimating a statistical property of a virtual channel generated from an effect of the transmission beamforming technique using a statistical property of a common pilot channel estimated from a common pilot signal; determining an optimum dedicated pilot pattern by using the estimated statistical property of the virtual channel; and estimating a channel using the optimum dedicated pilot signal.
Related US patents	US20110261675A | US7929414B | US20110090972A

Appl. No. (Date)	**PCT / KR2010 / 000875** (2010-02-11)
Pub. No.	WO2010 / 137790
Title of the invention	Positioning system and method based on radio communication apparatus comprising multiple antenna
Inventors	KEE, Changdon | LEE, Taikjin
Gist of the invention	A positioning system based on a radio communication apparatus including multiple antennas, which calculates a position of a terminal using only a single communication apparatus in which the multiple antennas are mounted, and calculates the position of the terminal more accurately by using two or more communication apparatuses.
Figure	[Fig. 1] 
Claim 1	A positioning system based on a radio communication apparatus including multiple antennas, comprising: a communication apparatus including multiple antennas and generating or relaying a communication signal; a terminal communicating with the communication apparatus; and a position calculation module calculating a position of the terminal using a phase difference between signals that are transmitted from the multiple antennas to the terminal.
Related US patents	US20120075145A

Appl. No. (Date)	**PCT / KR2011 / 000114** (2011-01-07)
Pub. No.	WO2011 / 084007
Title of the invention	Transmission beamforming method and apparatus in an orthogonal frequency division multiplexing-based MIMO wireless system
Inventors	LEE, Yong-Hwan | KWON, O-Jin | LEE, Keon-Wook
Gist of the invention	A method for transmitting beamforming in an orthogonal frequency division multiplexing (OFDM)-based MIMO wireless system, reduces the channel quantization error and feedback load, wherein a receiver estimates current channel information by using time and 2D channel correlation information of a frequency based on the previous channel information, compares the estimated current channel information with an actual channel and then feeds back the differential channel information.
Figure	
Claim 1	A method for transmitting beamforming in an orthogonal frequency division multiplexing (OFDM)-based MIMO wireless system, wherein the method comprises: A) estimating a channel from a received pilot signal, and obtaining time for the estimating channel and 2D channel correlation information of a frequency band; B) obtaining estimated channel information based on the channel correlation information; C) obtaining differential information that represents a difference between the current channel and the estimated channel and quantizing the differential information; D) selecting an optimum index by using a predefined code book from the quantized differential information; and E) generating a transmission beam weight based on the selected index.
Related US patents	US20110261675A

Appl. No. (Date)	**PCT / KR2011 / 001025** (2011-02-16)
Pub. No.	WO2011 / 102641
Title of the invention	Method and apparatus for transmitting multi-radio power using time division mode
Inventors	NAM, Sang Wook | PARK, Jong Min | TAK, Youn Do | KIM, Yoon Goo
Gist of the invention	A multi-radio power transmission method, which wirelessly transmits power to each of at least one of the receivers using a time division mode in an exclusive power transmission time, so that it is possible to maintain high and uniform power transmission efficiency with respect to a plurality of receivers.

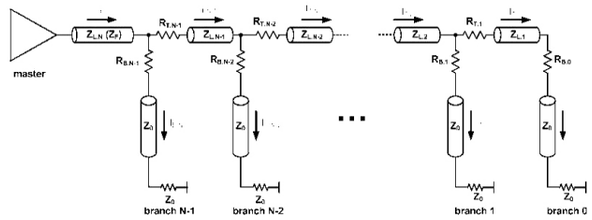
Figure



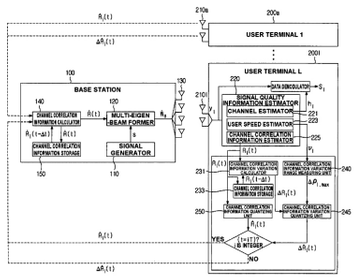
Claim 1	A multi-radio power transmission method for wirelessly transmitting power to a plurality of receivers using a time division mode, wherein the method comprises the steps of: (a) allocating an exclusive power transmission time to each of at least one of a plurality of receivers; and (b) wirelessly transmitting power to each of at least one of the receivers, wherein the method sets a receiving state of an i^{th} receiver in an ON-state during the exclusive power transmission time allocated to the i^{th} receiver, and sets the receiving states of the other receivers except for the i^{th} receiver in an OFF-state.
Related US patents	US20110261675A

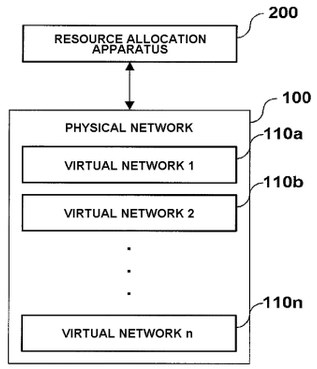
Appl. No. (Date)	**PCT / KR2011 / 001117** (2011-02-21)
Pub. No.	-
Title of the invention	Multi drop bus system and impedance matching method
Inventors	JUNG, Deok Gyun | YOON, Yeo Hwan
Gist of the invention	The present invention provides the uniform transmission of power without excessive increase of resistance value for impedance matching.

Figure

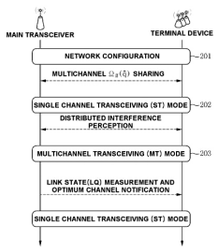


Claim 1	A multi drop bus system for sending and receiving signals through accessing the N(k=0, 1, 2, ..., N-1) slaves to bus connected to the master, wherein the k node is the node where the k branch connected to the k slave, which is connected to the bus, $Z_{L,K}$ is line impedance between the k node and the k-1 node, $Z_{L,N}=Z_F$ (front line impedance) is line impedance between the master and the k node, wherein the multi drop bus system comprising: resistance $R_{T,K}$ connected to the bus line between the k node and the k-1 node in series; and resistance $R_{B,K}$ connected to the k branch in series, wherein line impedance of each line is uniformly Z_O ,wherein the bus line impedance $Z_{L,K}$ satisfies $Z_{L,K} \le \left(\frac{K+1}{K}\right) \cdot Z_{L,K+1} \quad (1 \le K \le N-1)$ and $Z_{L,K} \ge \frac{Z_0}{K} \cdot (1 \le K \le N-1)$ as restrictive condition, wherein the resistance $R_{T,K}$ satisfies $R_{T,K} = \left(\frac{K+1}{K}\right) \cdot Z_{L,K+1} - Z_{L,K} \quad (1 \le K \le N-1)$, wherein the resistance $R_{B,K}$ satisfies . $R_{B,K} = (K+1) \cdot Z_{L,K+1} - Z_0 \quad (0 \le K \le N-1)$.

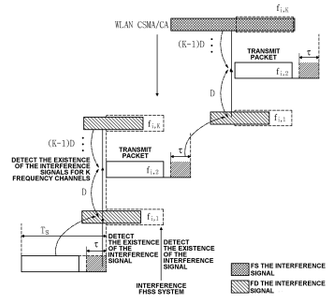
Appl. No. (Date)	**PCT / KR2011 / 002410** (2011-04-06)
Pub. No.	WO2011 / 126299
Title of the invention	Method for differentially quantizing channel information in multiple antenna radio system and system adopting same
Inventors	LEE, Yong-Hwan | CHO, Hee-Nam | LEE, Jin-Woo
Gist of the invention	A method for transmitting a signal to multiple user terminals using multiple antennas in a radio communication system, which reduces the number of quantization bits without a decrease in the system capacity so that it is possible to reduce the amount of uplink feedback information or to enhance the performance of the system with the same number of quantization bits.
Figure	
Claim 1	A method for transmitting a signal to multiple user terminals using multiple antennas in a radio communication system, wherein the method comprises: a main codebook feedback step of feeding a representative value index for the main codebook back to a base station, and forming multiple eigen-beams using the representative value index for the main codebook to transmit a data signal; and a sub-codebook feedback step of differentially quantizing only a part of region of the channel correlation information on the basis of the amount of change in the channel correlation information to generate a sub-codebook, feeding a representative value index for the sub-codebook back to the base station, and forming multiple eigen-beams using the representative value index for the sub-codebook to transmit a data signal.
Related US patents	US20120075145A | US20100232534A

Appl. No. (Date)	**PCT / KR2011 / 004544** (2011-06-22)
Pub. No.	-
Title of the invention	Method and apparatus for resource allocation in a virtual network
Inventors	LEE, Seung Ho | CHUNG, Moon Young | SEO, Seung Woo
Gist of the invention	A method for resource allocation in a virtual network of a resource allocation device, sets the path and allocates the bandwidth, so that the method is suitable for reducing waste of unnecessary resources and efficiency of network.
Figure	
Claim 1	A method for resource allocation in a virtual network of a resource allocation device, wherein the method comprises: (a) obtaining respectively a demand for average traffic between end nods by a virtual network; (b) obtaining respectively the bandwidth according to the obtained demand for each average traffic thereof and setting the path for the valid bandwidth; and (c) allocating the bandwidth to each virtual network based on the sum of the valid bandwidth for passing each link on the set path.
Related US patents	US20120051182A | US20120051180A | US20120051179A | US20110013608A

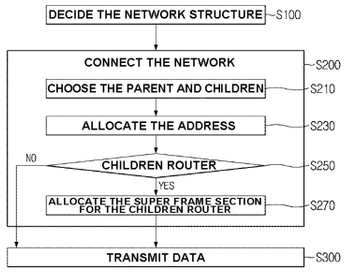
Signal Processing

Appl. No. (Date)	**PCT / KR2011 / 006539** (2011-09-02)
Pub. No.	WO2012 / 043991
Title of the invention	Method for transmitting a signal while avoiding the influences of an interference signal existing in the same channel in a communication system having a main communication device and a plurality of terminal communication devices
Inventors	LEE, Yong-Hwan | HAN, Jin-Seok | LEE, Seung-Hwan
Gist of the invention	A method for transmitting a signal while avoiding the influences of an interference signal in the same channel, temporarily transceive signals using a plurality of available transmission channels and determines the channel having a best link state as a transmission channel from among the plurality of used transmission channels and returns to an existing transmission system using a single channel.
Figure	
Claim 1	A method for transmitting a signal while avoiding the influences of an interference signal existing in the same channel in a communication system having a main communication device and a plurality of terminal communication devices, wherein the method comprises: (A) a process in which communication devices in the communication system perceive, in a distributed manner, whether or not an interference signal exists in a transmission channel being used; (B) a process in which the communication devices in the communication system temporarily transceive signals using a plurality of available transmission channels other than the transmission channel currently being used so as to avoid an interference signal if the interference signal is perceived in the (A) process; and (C) a process of determining the channel having a best link state as a transmission channel from among the plurality of used transmission channels in the (B) process and returning to an existing transmission system using a single channel.
Related US patents	US20110305148A | US20110261861A | US20110183692A | US20100166095A | US7773949B | US7773558B

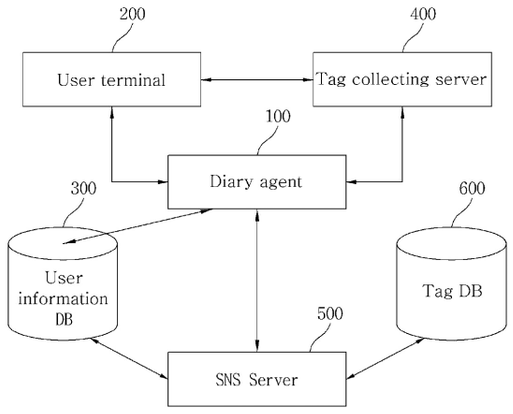
Signal Processing

Appl. No. (Date)	**PCT / KR2011 / 009253** (2011-12-01)
Pub. No.	-
Title of the invention	Method and apparatus for avoiding interference signal in frequency hopping spread spectrum system
Inventors	LEE, Young-Hwan | LEE, Seung Hwan | HAN, Jin-Seok
Gist of the invention	A method for transmitting and receiving signal through avoiding same and different kind of interference signals in a same band of FHSS system, improves performance of wireless communication system, i.e., bluetooth.
Figure	
Claim 1	A method for transmitting and receiving signal through avoiding same and different types of interference signals in a same band of FHSS system, wherein the method comprises: determining a variable of a frequency hopping channel set and an interference signal detector considering the characteristic of the interference signals; detecting the existence of the interference signals for a frequency hopping candidate channels used in next frequency hopping using the decided interference signal detector; transmitting the signal through the channel which has absence of the interference signals through the interference signal detector among the frequency hopping candidate channels; receiving the signal through the channel in which the signals is transmitted, among the frequency hopping candidate channels; and implementing the transmitted power control using the value of signal to noise ratio for the channels having no interference signals through the channel in which the signals is transmitted, among a plurality of frequency hopping candidate channels.
Related US patents	US20110261861A

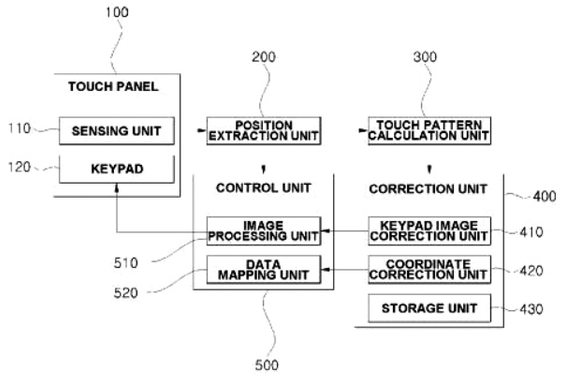
Signal Processing

Appl. No. (Date)	**PCT / KR2012 / 000484** (2012-01-19)
Pub. No.	-
Title of the invention	System for self configuration of wireless sensor network and method using the same
Inventors	LEE, Young-Hwan | LEE, Seung Hwan | HAN, Jin-Seok
Gist of the invention	A method for self configuration of wireless sensor network(WSN) based on the cluster tree structure, enables performance of large scale self configuration of WSN to improve.
Figure	
Claim 1	A method for self configuration of wireless sensor network(WSN) based on the cluster tree structure, comprising: (a) a step of the network structure decision determining the network structure by calculating the largest number of children router devices and the largest number of children end devices according to the network depth in a respective tree step, and by calculating the number of devices located in coverage area and the smallest network depth in order to connecting whole area in WSN through the coordinator, one of the parent device; (b) a step of the network connection allocating the super frame section for the children router device among the children router devices and choosing the children devices according to joining request of the children devices and allocating the address to the chosen children devices through the parent devices in a respective tree step; and (c) a step of data transmission in that a router device having packet, which explores routing path and transmits packet through comparing the final destination address of the packet and the address of the router devices having packet.
Related US patents	US7302762B

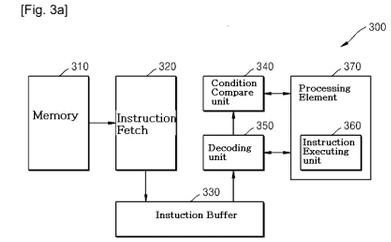
Mobile Communication

Appl. No. (Date)	**PCT / KR2011 / 003820** (2011-05-25) Core
Pub. No.	-
Title of the invention	Method for providing diary-based social network service and system using the same
Inventors	Cho, Min Gu | Choi Yang Hee | Han Jin Young | Kwak Won Young | Kwon Tae Kyung | Lee Ji Hoon
Gist of the invention	A method for providing a diary-based social network service, enables a user to create a diary about his own life in order to meet a desire to express himself and provides a social network service by utilizing tagging information in the created diary to form a new social network with people or specialist who have the same interests.
Figure	
Claim 1	A method for providing a diary-based social network service(SNS), comprising: creating a user tag list constructed with tags that are acquired by a user terminal; forming a social network between a user and other users, based on tags of the user tag list; and creating a diary based on the user tag list and the social network associated with tags of the user tag list.

Mobile Communication

Appl. No. (Date)	**PCT / KR2011 / 008182** (2011-10-31)
Pub. No.	WO2011 / 019218
Title of the invention	Method and apparatus for inputting character
Inventors	LEE, Chang Gun | KWON, Oh Chul | KIM, Kang Wook | WE, Kyong Soo | HAN, Jae Hwa | PARK, Myung Gon | LEE, Du Hee | KIM, Jong Chan | KIM, Ju Sung | JEONG, Sang Min
Gist of the invention	A method for inputting character using a touch panel formed with a key pad in a display surface, which provides a user with optimized keypad interface.
Figure	
Claim 1	A method for inputting a character using touch panel formed with a key pad in a display surface, comprising: computing the touch patterns of user for each key in the key pad thereof; and selecting a target key which becomes an object of the scope change according to the touch pattern.
Related US patents	US8108387B

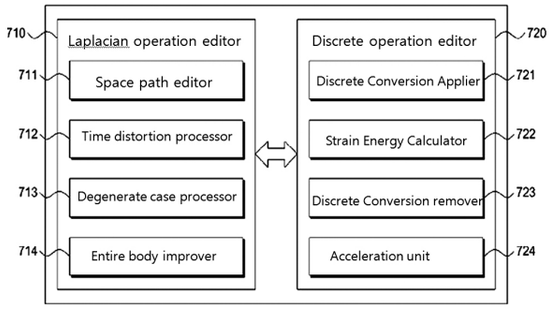
Data Processing

Appl. No. (Date)	**PCT / KR2011 / 001044** (2011-02-17) Core
Pub. No.	-
Title of the invention	Method and processing apparatus for processing instructions suing processing element
Inventors	CHOI, Ki-Young | HAN, Kyu-Seung | BAEK, Jong-Kyung
Gist of the invention	Processing instructions by processing element which can proceed a branch statement with high speed, in the processing element constituting CGRA or SIMD by DISE method.
Figure	[Fig. 3a] 
Claim 1	A method for processing instruction by processing element, comprising: identifying step, identifying a branch statement including a first sentence which is set of one or more instructions continuously executing when satisfying predetermined conditions, and a second sentence which is set of one or more instructions continuously executing when not satisfying predetermined conditions; flag-setting step, setting a flag on a register allocated the processing element, instructing which of flags executes between the first sentence and the second sentence, according to result comparing pre-counting result executed in the processing element with condition of the branch statement; buffer-storing step, simultaneously taking a first instruction in the first sentence and a second instruction in the second sentence to a instruction buffer, and storing in the each separate space in the buffer; decoding step, decoding one of the first instruction and the second instruction, stored in the instruction buffer according to flag set on the register; and executing step, executing the decoded instructions by the processing element.

Appl. No. (Date)	**PCT / KR2009 / 003307** (2009-06-19)
Pub. No.	WO2010 / 143766
Title of the invention	System and method for motion editing multiple synchronized characters
Inventors	LEE, Je-Hee | KIM, Man-Myung
Gist of the invention	Motion editing system which edits motions of multiple synchronized characters by editing a spatial route of inputted data, processing the distortion of the interaction time, and applying a discrete transformation.

700

Figure

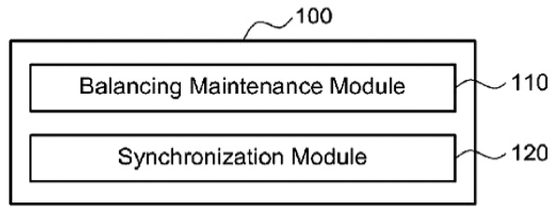


Claim 1	A motion editing system, comprising: a Laplacian motion editor to edit a spatial path of character data input according to user constraints, and to process interactive time warping; and a discrete motion editor to apply discrete transformations to insert, delete, or replace motions of a character according to the character data on motion paths of the character data.
Related US patents	US20120006112A | US20120075349A | US20100277483A | US7647214B | US7535472B | US7493243B | US20060139355A | US20090228256A | US8055490B | US20090058991A

Appl. No. (Date)	**PCT / KR2010 / 004943** (2010-07-27)
Pub. No.	WO2012 / 008640
Title of the invention	Apparatus and method for controlling a data-based biped
Inventors	LEE, Yoon-Sang | LEE, Je-Hee
Gist of the invention	A biped control, wherein target pose information for tracking control is provided by an animation engine, and/or is generated by modulating the reference pose information acquired from video capture data.

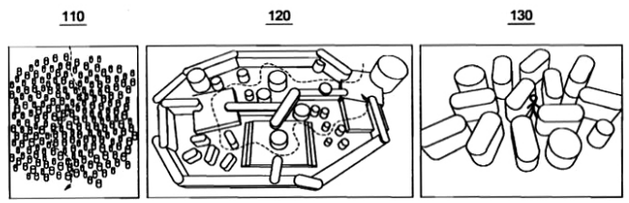
[Fig. 1]

Figure

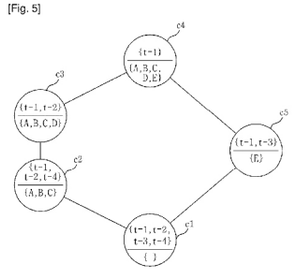


Claim 1	A data-based biped control apparatus, comprising: a balance keeping module which generates target pose information for tracking by modulating the reference pose information using current pose information of the biped feed-backed; and a synchronizing module which edits orbit by time-flow of at least partial element included in the reference pose information using the current pose information.
Related US patents	US20060139355A

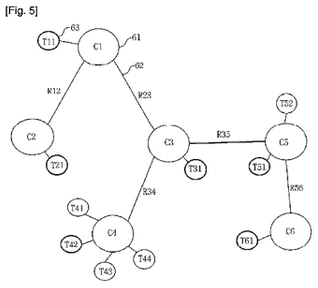
Data Processing

Appl. No. (Date)	**PCT / KR2011 / 000928** (2011-02-11)
Pub. No.	-
Title of the invention	Apparatus and method for controlling motion
Inventors	LEE, Je-Hee | CHOI, Myung-Gul | KIM, Man-Myung | HYUN, Kyung-Lyul
Gist of the invention	Controlling character in complex virtual environment. Controlling character can modify 3D path information and change motion fragment, based on constraint information.
Figure	
Claim 1	A motion control apparatus, comprising: a 3D path modifier which edits 3-dimensional path about motion fragment of a character in the virtual world, based on a constraint information; and a motion changer which changes the motion fragment, based on the modified 3-dimensional path.
Related US patents	US20120006112A | US20120075349A | US20100277483A | US7647214B | US7535472B | US7493243B | US20060139355A | US20090228256A | US8055490B | US20090058991A

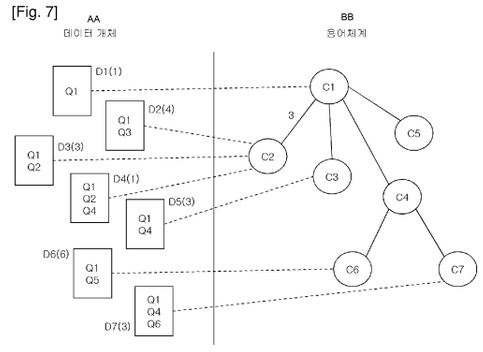
Data Processing

Appl. No. (Date)	**PCT / KR2011 / 002264** (2011-04-01)
Pub. No.	WO2011 / 122897
Title of the invention	System and method for supporting concept lattice-based query term mapping by weight values of users
Inventors	KIM, Hong-Gee | KIM, Eung-Hee | SONG, Seung-Jae
Gist of the invention	A concept lattice-based query term mapping system which collects terms (terms in use) used correlatively with one another by a plurality of users, and represents terms associated with specific terms (query terms) in a graph.
Figure	[Fig. 5] 
Claim 1	A concept lattice-based query term mapping system supporting mapping a query term to terms in use associating each other, by generating concept lattice for the terms in use used associated each other by plural subject for use, comprising: a collector for terms in use, which collects the terms in use related to each subject with association each other; a concept lattice generator, which generates concept lattice graph constituting a node ("concept node") for a term setand the subject for use set using the term set having association, wherein the term set of a lower concept node inheriting all the term sets of an upper concept node; and a query graph generator, which receives the query term as input and generates associated term graph constituting a term node regarding a query term, wherein the term node corresponds to the concept node of the concept lattice graph, and the concept node corresponds with the term node including the query term.
Related US patents	US20100241622A | US20100241622A

Data Processing

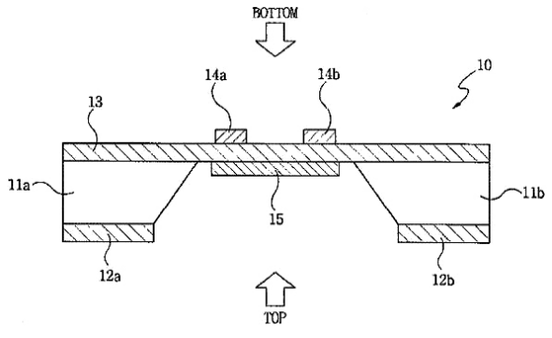
Appl. No. (Date)	**PCT / KR2011 / 002623** (2011-04-13)
Pub. No.	WO2010 / 129608
Title of the invention	Terminology-editing system based on reference terminology
Inventors	KIM, Hong-Gee | KIM, Eung-Hee | SONG, Seung-Jae | LEE, Sung-In | JEONG, Sang-Won | LEE, Soo-Kyoung
Gist of the invention	A terminology-editing system based on reference terminologies. The present invetion can structurally store information on patients, and ensure the re-usability of the information based on the information storage system, as well as interoperability for the mutual exchange of medical information.
Figure	[Fig. 5] 
Claim 1	A terminology-editing system based on reference terminologies, which creates a terminology system of medical terminologies used in medical institutions, comprising: a manager of reference terminologies which stores the reference terminology system structured on the basis of objects and relationships; a terminology object generator, which inputs medical terminologies and generates objects from the medical terminologies; a reference terminology search unit, which searches the reference terminology and present it; a mapping unit, which inputs a selection of objects of reference terminologies corresponding to the objects of the medical terminologies and establishes a mapping relationship among the objects; terminology relation setting unit, which establishes a terminology relationship or mapping relationship among objects of the medical terminologies, and a display unit, which displays the objects related to the objects of the medical terminologies and relationship among the medical terminologies.
Related US patents	US8086468B

Data Processing

Appl. No. (Date)	**PCT / KR2011 / 002749** (2011-04-18)
Pub. No.	WO 2011 / 136491
Title of the invention	Terminology-system-based system for supporting data object definition
Inventors	KIM, Hong-Gee | SONG, Seung-Jae
Gist of the invention	The present invention provides terminology-system-based system for supporting data object definition, which delimits a concept by means of a qualifier. Using the system. new data objects can be more systematically and conveniently defined.
Figure	[Fig. 7]  AA ... Data object BB ... Terminology system
Claim 1	A terminology-system-based system for supporting data object definition, comprising: a terminology-system manager, which stores a terminology system in which a concept is structured to a terminology object and a terminology relation; a storage for data object, which stores a data object for the concept; a data object identifier, which defines a data object for a selected concept (hereinafter, a corresponding concept) and receives selection of the corresponding concept and a qualifier which qualifies the corresponding concept, and definesthe qualifier; and a qualifier recommendation unit, which searches for a data object which is stored and defined as a concept which is the same as the corresponding concept (hereinafter, referred to as the same concept), and recommending a qualifier of the object.

Appl. No. (Date)	**PCT / KR2009 / 002941** (2009-06-02)
Pub. No.	WO2010 / 140719
Title of the invention	Micro calorimeter device with improved accuracy
Inventors	KIM, Kee-Hoon | PARK, Yun Daniel | KIM Hyung-Joon | KIM, Jae-Wook | SUH, Ki-Sung
Gist of the invention	A micro calorimeter device with improved accuracy having a new design based on a silicon nitride thin platform implemented with a Nano Electro-Mechanical System(NEMS) processing technology.

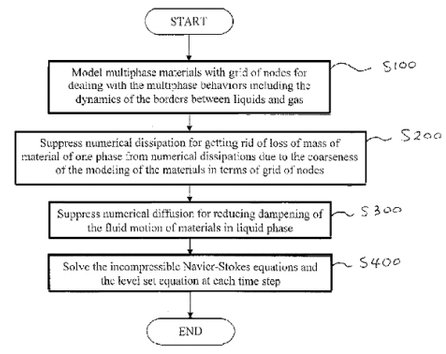
Figure



Claim 1	A micro calorimeter device with improved accuracy, comprising: a first silicon nitride thin film (12a,12b) on the upper side of a silicon frame (11a,11b) having both sides polished; a second silicon nitride thin film (13) on the lower side of the silicon frame; a heater/sensor (14a, 14b) connected to a power extension cable on the lower side of the second silicon nitride thin film (13); and an isothermal layer (15) on the upper side of the second silicon nitride thin film, thereby improving the accuracy of the micro calorimeter device, wherein the heater/sensor (14a, 14b) separates sections by being formed as a heater when the other one formed as a sensor.

Appl. No. (Date)	**PCT / KR2010 / 001892** (2009-03-29)
Pub. No.	WO2010 / 114259
Title of the invention	Semi-lagrangian CIP fluid solver without dimensional splitting
Inventors	KO, Hyeong-Seok | SONG, Oh-Young | KIM, Do-Yub
Gist of the invention	A new constrained interpolation profile method, which is stable and accurate but requires less amount of computation.

Figure



Claim 1	A method for simulating fluid using semi-Lagrangian CIP fluid solver without dimensional splitting, the method comprising steps for: modeling multiphase materials with grid of nodes for dealing with the multiphase behaviors including the dynamics of the borders between liquids and gas; suppressing numerical dissipation for getting rid of loss of mass of material of one phase from numerical dissipations due to the coarseness of the modeling of the materials in terms of grid of nodes; and suppressing numerical diffusion for reducing dampening of the fluid motion of materials in liquid phase, wherein the step of modeling multiphase materials comprises steps of: describing liquid and gas with a set of nonlinear partial differential equations that describe the flow of the fluids; representing the liquid-gas interface as an implicit surface; and determining properties of the materials, from the information

Claim 1

about the liquid-gas interface, including the surface curvature and the surface tension, wherein the set of nonlinear partial differential equations comprises multiphase incompressible Navier-Stokes equations, wherein the step of representing the liquid-gas interface comprises a level set equation, φ, wherein the flow of fluid is described by the incompressible Navier-Stokes equations:

$$\nabla \cdot u = o$$

; and

$$\frac{\partial u}{\partial t} = -u \cdot \nabla u + \frac{f}{\rho} + \frac{\nu}{\rho} \nabla^2 u - \frac{\nabla \rho}{\rho}$$

wherein u denotes the velocity field of the fluid, p pressure, ρ the density, ν the kinetic viscosity, and f represents the external forces per volume, wherein the liquid evolves dynamically in space and time according to the underlying fluid velocity field, u, wherein the level set function changes according to the dynamical evolution of liquid and is updated by the level set equation,

$$\frac{\partial \varphi}{\partial t} + u \cdot \nabla \varphi = 0,$$

further comprising the step of solving the incompressible Navier-Stokes equations and the level set equation at each time step, wherein the step of solving the incompressible Navier-Stokes equations and the level set equation comprises steps of:
advecting the level set according to the level set equation;
updating the velocity by solving the Navier-Stokes equations; and
simulating droplets and bubbles, wherein the level set function φ and the fluid velocity field u are updated, wherein the step of updating the velocity comprises steps of:
calculating the advection component u·∇u using the semi-Lagrangian method;
applying the forces f/ρ;
adding the effect of the viscous term ν/ρ∇2u by employing implicit central differencing; and
projecting the velocity field so that the condition ∇·u=0 is met, wherein the step of calculating the advection component comprises steps of:
applying an unsplit semi-Lagrangian constrained interpolation profile (USCIP) method of using the function values at the grid points and the spatial derivatives at those points for constructing the profile inside the grid cell; and
solving the level set equation to advect the level set values, and wherein, with the CIP method, the profile corresponding to the interval [xi,xi+1] in a two-dimensional case is represented by a polynomial,

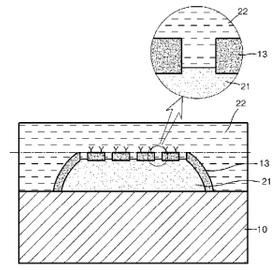
$$\varphi(x,y) = \sum_{o \le i+j \le 3} c_{ij} x^i y^j + c_{31} x^3 y + c_{13} x y^3. \quad (7)$$

where C00, . . . , C31 are coefficients of the polynomial.

Related US patents: US8055490B

Appl. No. (Date)	PCT / KR2010 / 006466 (2010-09-20)
Pub. No.	WO2012 / 039520
Title of the invention	Transducer and method for manufacturing same
Inventors	LEE, Jung-Hoon | SHIN, Jae-Ha | PARK, Jin-Hyuk | CHOI, Jun-Kyu
Gist of the invention	A transducer and a method for manufacturing same in which a first liquid and a second liquid are supplied such that, at the boundary therebetween, a deformation-generating part, including a perforated structure having one or more holes therein, in formed, and the effect of external pressure is negated by the action between the liquids.

Figure



Claim 1

A transducer measuring power applied by combining analyte to a surface, comprising:
a Chamber; a change generator for separating the chamber to a first region and a second region, provided a combining layer for combining with the analyte on a surface facing the first region, and including one or more hole passed through the first region and the second region; a change occurrence unit having porous member shape including holes; a measure amount estimator member estimating changing amount of the change occurrence unit; a first liquid including target substance, provided in the first region; and a second liquid generating a interface with the first liquid near the hole, provided in the second region, wherein the change occurrence unit changes elasticity by combining the target substance to the combining layer.

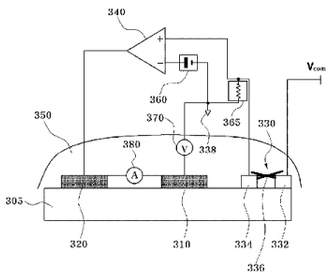
Related US patents: US7742616B | US20100321009A | US20100259252A | US725118B | US6956384B | US6924624

Etc.

Appl. No. (Date)	**PCT / KR2011 / 001006** (2011-02-16)
Pub. No.	WO2011 / 122765
Title of the invention	Reference potential adjustment device and a measuring device equipped with the same
Inventors	AHN, Jin-Hong | PARK, Young-June
Gist of the invention	Reference potential adjustment device. The present invention can be easily manufactured and reduce a price, comparing to a conventional reference electrode using Ag/AgCl.

Figure

[Fig. 3]



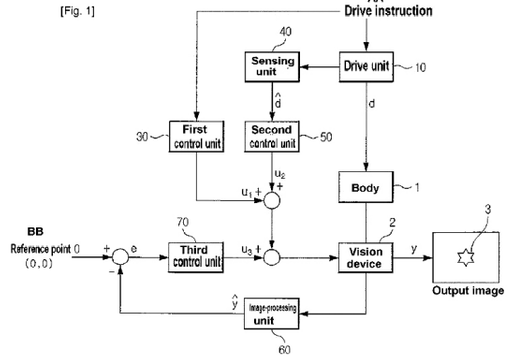
Claim 1	A reference potential adjustment device comprising: a reference potential measuring part for measuring the potential of a solution; a counter electrode which is disposed inside the solution and varies the electrical potential of the solution via a redox reaction with the solution; and a comparator which compares a measured voltage provided from the reference potential measuring part with a reference voltage provided from a reference power source, and generates a control signal for adjusting the reactivity between the counter electrode and the solution, wherein the reference potential measuring part comprises: a reference electrode; a common electrode which is disposed with a space apart from the reference electrode; and at least one nanostructure which is in contact with the reference electrode and the common electrode, and of which the electrical conductivity varies in accordance with the potential of the solution.

Etc.

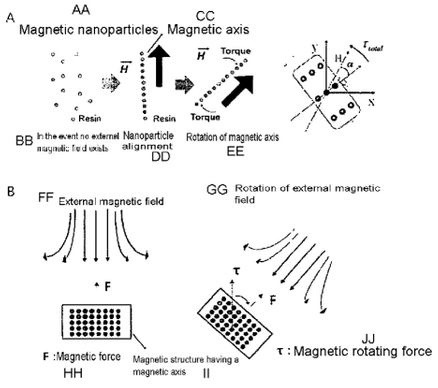
Appl. No. (Date)	**PCT / KR2011 / 001190** (2011-02-23)
Pub. No.	WO2012 / 018168
Title of the invention	Control system and method for a drive instruction-based vision device for target tracking
Inventors	CHO, Dong-Il | PARK, Jae-Hong
Gist of the invention	A control system and method for a drive instruction-based vision device and uses a drive instruction, or the drive instruction and a drive information sensed in a robot together.

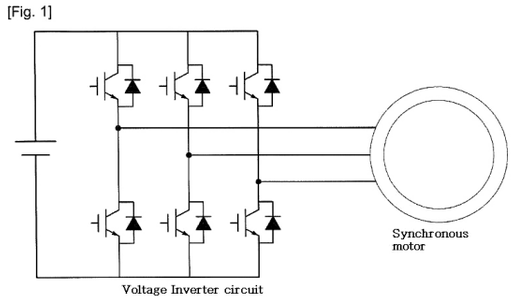
Figure

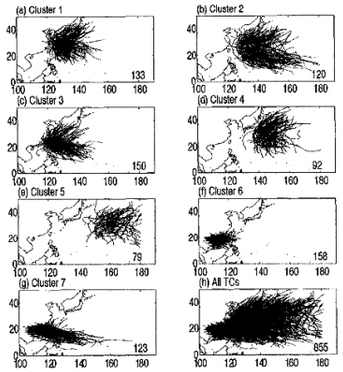
[Fig. 1]



Claim 1	A control system and method for a drive instruction-based vision device, comprising: a movable body; a vision device driven in connection with the body and receiving video information; a drive unit driving the body according to drive instructions; and a control unit driving the vision device while calculating the drive information of the body using the drive instructions and compensating for effects caused by the driven body using the calculated drive information.

Appl. No. (Date)	**PCT / KR2011 / 002239** (2011-03-31)
Pub. No.	WO2011 / 122883
Title of the invention	Method for magnetically controlling a magnetic structure
Inventors	KWON, Sung-Hoon | LEE, Ho-Won | KIM, Jun-Hoi | KIM, Ji-Yun
Gist of the invention	A method for magnetically controlling a magnetic structure. Using the prevent invention, various magnetic structures can be made with various magnetic axis and improve time and price for manufacture.
Figure	
Claim 1	A method for magnetically controlling a magnetic structure, comprising: a step of providing a solution containing a magnetic structure having a magnetic axis along which magnetic nanoparticles are aligned; and a step of applying an external magnetic field to the solution so as to control the motion of the magnetic structure.

Appl. No. (Date)	**PCT / KR2011 / 002756** (2011-04-18)
Pub. No.	-
Title of the invention	Winding-type synchronous machine having mover built in inverter circuit and method for controlling it
Inventors	SEOL, Seung-Ki | HA, Jeoung-Ik | JEONG, Eun-Soo
Gist of the invention	A winding-type synchronous machine including winding-type synchronous motor or generator having mover built in inverter circuit. According to the present invention, problem about use of rare-earth permanent magnet can be solved, and the winding-type synchronous machine which not cause pulsation problem can be implemented.
Figure	[Fig. 1] 
Claim 1	A winding-type synchronous machine including a winding-type synchronous motor or a generator having mover built in inverter circuit, comprising: a mover inverter circuit, which connects the mover of the winding-type synchronous machine; and a mover circuit control unit, which controls the inverter circuit connected the mover inverter circuit.

Appl. No. (Date)	**PCT / KR2011 / 006772** (2011-09-14)
Pub. No.	WO2012 / 046959
Title of the invention	Prediction model for summer typhoon number and track for each group
Inventors	HEO, Chang-Hoe | KIM, Hyeong-Seog
Gist of the invention	A prediction model for summer typhoon track in the Pacific Northwest. According to the present invention, the tracks of the typhoons from June until October over the entire area of the Pacific Northwest may be more precisely predicted.
Figure	

Claim 1

A method for predicting the number of typhoons for group of summer typhoon using a computer, comprising:
(a)
A group classification step which defines a distance (dist) between typhoon locations for 6 hours to a [formula 1] and data distance (edist) of typhoon location for converting to a [formula 2], using a typhoon location data for 6 hours interval of each typhoon which is measured for certain period of year-unit in Pacific Northwest, then converts the typhoon
location data for 6 hours interval of each typhoon to 21 same distance location data for each typhoon having same interval distance using the dist, the edist and a [formula 3], divides the Pacific Northwest to the predetermined number of groups using

Claim 1

the predetermined two or more numbers of groups and the 21 same distance location data for each typhoon as an input data, and classified each typhoon to be included in the nearest region of the 21 same distance location data; and
(b)
a predicting step of the number of typhoons for groups, which extracts two or more predicting elements of predicting elements including sea-surface temperature of a particular region, a region of the 500hPa height positions, a region of the 200hPa and 850hPa horizontal wind field representing the difference between the vertical wind shear, a region of the east and west of 50hPa wind field, a region of the troposphere, average east-west wind field, a particular region possible precipitation of water vapor, and certain areas of the east and west of the 850hPa wind field as a predicting element about atmosphere / ocean circulation field from June to October which was affected by hurricane activity in the Northwest Pacific region, and was affected to a number of typhoons in each group classified in the above step (a), as a predicting element used to predict the number of typhoon($\tilde{y}_i$) in each group which is classified in the step (a), and predicts the number of typhoons for each group using a [formula 4],
wherein $a^j_{i,m}$ and $a^j_{i,o}$ of the [formula 4] are $a^j_{i,o}$ and $a^j_{i,o}$ values having a [formula 5] and minimize f using a [formula 6],

[Formula 1]

$$dist_i = \sqrt{(x_{i+1}-x_i)^2 + (y_{i+1}-y_i)^2}\ ,\ for\ i=1,\ldots N-1.$$

In the [Formula 1], xiand yi refer to latitude and longitude of ith location, N is the number of typhoon location data for 6 hours.

[Formula 2]

$$edist_i = \frac{1}{20}\sum_i^{N-1} dist_i$$

[Formula 3]

$$\tilde{x}_j = x_1\ ,\ \tilde{y}_j = y_{m1}\ \ for\ j=1,$$

$$\tilde{x}_j = x_N\ ,\ \tilde{y}_j = y_N\ \ for\ j=21,$$

$$\begin{cases} \tilde{x}_j = x_i + \frac{(x_{i+1}-x_i)}{dist_i}\left((j-1)\,edist_i - \sum_{i=1}^{l-1} dist_i\right) \\ \tilde{y}_j = y_i + \frac{(y_{i+1}-y_i)}{dist_i}\left((j-1)\,edist_i - \sum_{i=1}^{l-1} dist_i\right) \end{cases} \quad for\ j=1$$

$$2.\cdots 20.$$

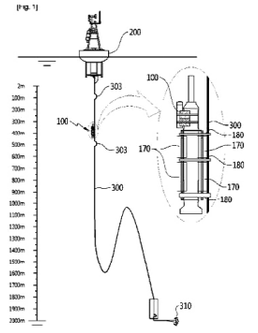
In the [Formula 3], (x, y) is location(latitude, longitude) of typhoon for interval of 6 hours provided Tokyo Typhoon Center. N is the number of typhoon location data for 6 hours, and l is defined to a positive integer meeting $\sum_{i=1}^{l-1} dist_i \le (j$ $-1)\times edist < \sum_{i=1}^{l} dist_i$

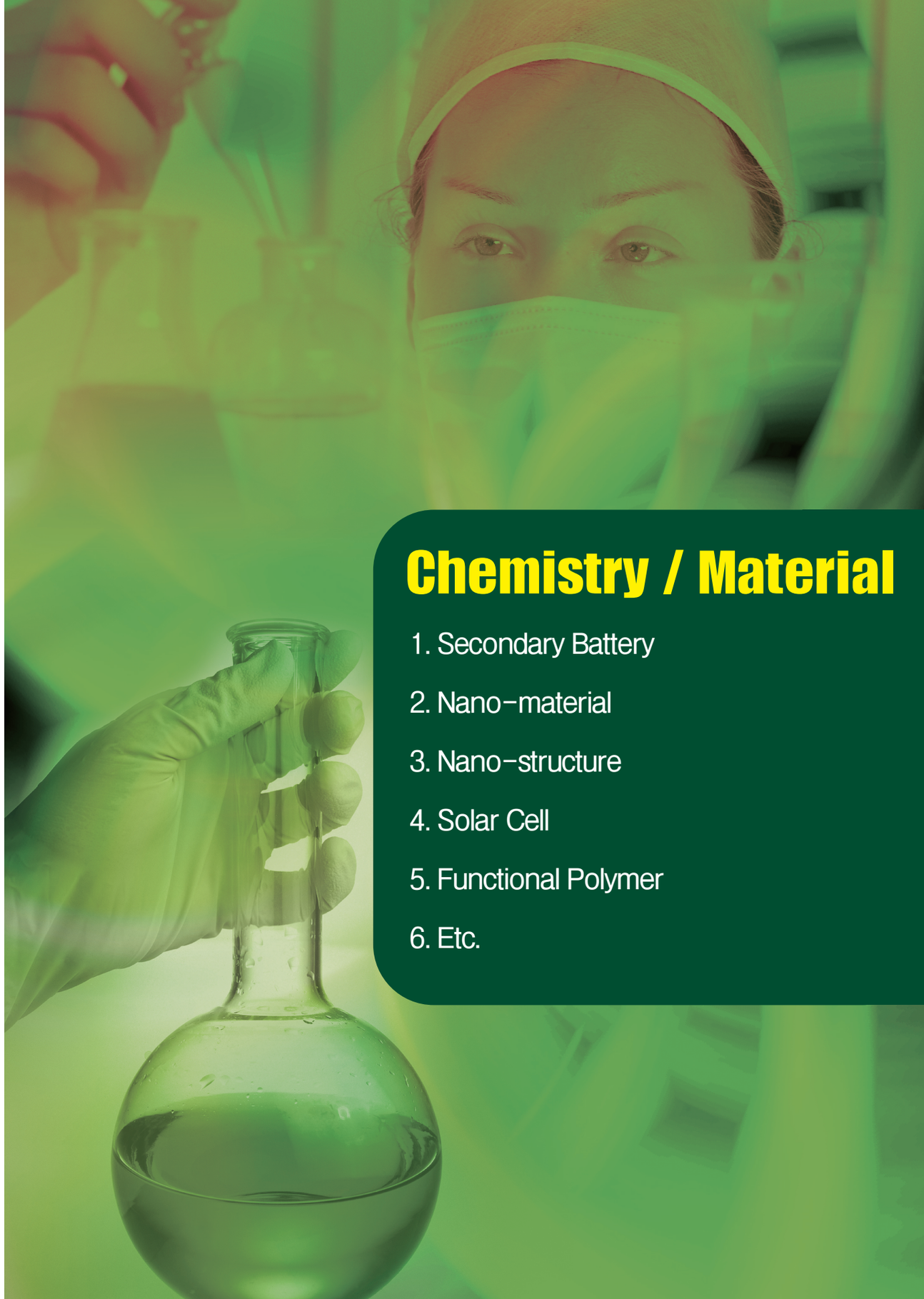
[Formula 4]

$$\tilde{y}_i^j = \exp\left(a_{i,0}^j + \sum_{m=1}^{n_j} a_{i,m}^j x_{i,m}^j\right)$$

In the [Formula 4], $\tilde{y}_i^j$ is predicted value of the number of

Claim 1	typhoons in ith group (Ci) of j year, $x^j_{i,m}$ is mth predicting element for predicting the number of typhoon of Ci group in j year, ni is the number of the predict element for predicting typhoon of Ci group, $a^j_{i,m}$ is regression coefficient of mth predicting element for predicting the number of typhoon of Ci group in j year, $a^j_{i,o}$ is regression constant for predicting the number of typhoon of Ci group in j year. [Formula 5] $let,\ z^j_i = \ln(\tilde{y}^j_i)$ $z^j_i = a^j_{i,0} + \sum_{m=1}^{nj} a^j_{i,m} x^j_{i,m}$ [Formula 6] $f = \sum_{i=1981}^{j-1} \left(z^j_{i,0} - a^j_{i,0} - \sum_{m=1}^{nj} a^j_{i,m} x^j_{i,m} \right)^2$ In the [Formula 6], f is least square method for deriving $a^j_{i,m}$ and $a^j_{i,o}$ using the least squares method of multiple linear regression.

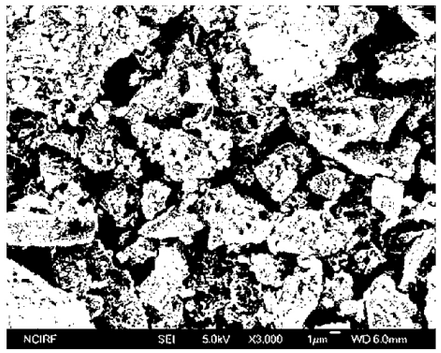
Appl. No. (Date)	**PCT / KR2011 / 007212** (2011-09-30)
Pub. No.	WO2012 / 044100
Title of the invention	Oceanographic observation buoy system using wireless communication modem, and method therefor
Inventors	KANG, Dong-Jin | KIM, Kyung-Ryul | KIM, Ki-Wan
Gist of the invention	An oceanographic observation buoy system using a wireless communication modem, and a method therefor. A separate wired communication cable is not required since data of the profile device and the buoy device is processed for exchange there etween using a wireless communication modem, so that a corresponding system can be quickly and simply installed, and maintenance and repair work can easily be carried out.
Figure	
Claim 1	An oceanographic observation buoy system using a wireless communication modem, comprising: a profile device which generates oceanographic state observation results according to water depths by observing oceanographic states while moving along a mooring wire rope in the water when a preset observation time is reached, and processes the oceanographic state observation results according to water depth which are transmitted to a buoy device in real time through a wireless communication modem; and a buoy device which controls the operation of the profile device using a wireless communication modem and processes the oceanographic state observation results according to water depth, which is transmitted from the profile device in real time, to be transmitted to an administer terminal through a communication network.



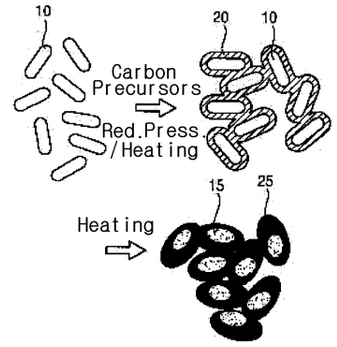
Chemistry / Material

1. Secondary Battery
2. Nano-material
3. Nano-structure
4. Solar Cell
5. Functional Polymer
6. Etc.

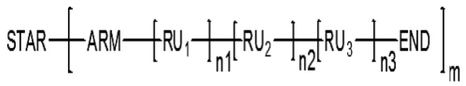
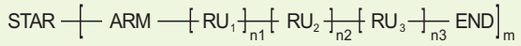
Secondary Battery

Appl. No. (Date)	**PCT / KR2010 / 005299** (2010-08-12) Core
Pub. No.	WO2011 / 019218
Title of the invention	Amorphous anode active material, preparation method of electrode using same, secondary battery containing same, and hybrid capacitor
Inventors	KU, Jun-Hwan | PARK, Kyung-Jin | KIM, Ji-Sun | RYU, Ji-Heon | OH, Seung-Mo
Gist of the invention	An amorphous anode active material, comprising at least one of amorphous metal oxide (or phosphate) with improved storage space of lithium, sodium, etc. and improved diffusion velocity of ions.
Figure	
Claim 1	An amorphous anode active material, comprising at least one of amorphous metal oxide or metal phosphate, wherein the metal oxide and metal phosphate are amorphous.
Related US patents	US7744023B | US7468226B | US20100159328A

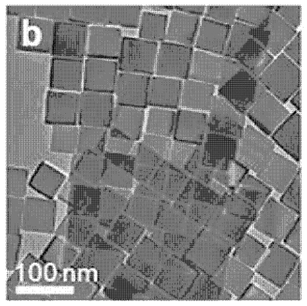
Secondary Battery

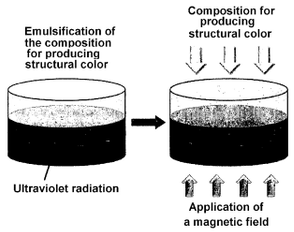
Appl. No. (Date)	**PCT / KR2010 / 005725** (2010-08-26)
Pub. No.	WO2011 / 025276
Title of the invention	Preparation method of metal oxide-carbon nanocomposite
Inventors	HYEON, Taeghwan | PIAO, Yuanzhe | SUNG, Yung-Eun | KIM, Hyun Sik
Gist of the invention	Preparation of metal oxide-carbon nanocomposite, comprising: heating mixture of nanoparticles (10) and carbon precursors under reduced pressure to form organic coating layer (20); and heating to form metal oxide nanoparticles (15) encompassed by a carbon substrate (25).
Figure	
Claim 1	A preparation method of metal oxide-carbon nanocomposite, comprising: treating mixture of nanoparticles containing metal oxyhydroxides or metal oxides and carbon precursor under the pressure below ambient pressure to form organic coating layer which encompasses the nanoparticles; and heating the nanoparticles encompassed by the organic coating layer to form metal oxide nanoparticles encompassed by a carbon substrate.
Related US patents	US7744023B | US7468226B | US20100159328A

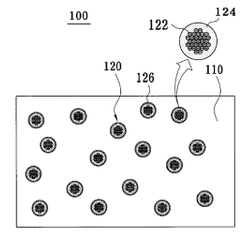
Secondary Battery

Appl. No. (Date)	**PCT / KR2011 / 002345** (2011-04-05)
Pub. No.	-
Title of the invention	Inorganic/organic star-shaped composite polymer, and polymer electrolyte membrane and lithium secondary battery prepared using the same
Inventors	LEE, Jong-chan | KIM, Dong-gyun
Gist of the invention	Organic/inorganic star-shaped composite polymer with improved mobility of polymer chain due to higher density of polymer chain in outer part than in inner part
Figure	
Claim 1	Star-shaped polymer represented by a following chemical formula: <Formula 1>  wherein, STAR in the formula 1 represents multi-armed core with a linkage number of m, and m is an integer of 3 to 8 as a theoretical maximum linkage number, and of 3 to 8 as a average real linkage number by reaction, wherein ARM represents a linkage portion for linking the STAR with the RU1, wherein END represents an end portion, wherein RU1, RU2 and RU3 represent a repeating unit which may be same as or different from each other and may independently comprise branch of oligomer or polymer, wherein n1 is an integer of 1 to 500, and n2 and n3 are independently an integer of 0 to 500, wherein RU1 and RU2, RU1 and RU3, RU2 and RU3, RU1 and RU2 and RU3 are may be combined independently in the form of random or block polymer unless at least one of n2 and n3 is 0.
Related US patents	US7744023B | US7468226B | US20100159328A

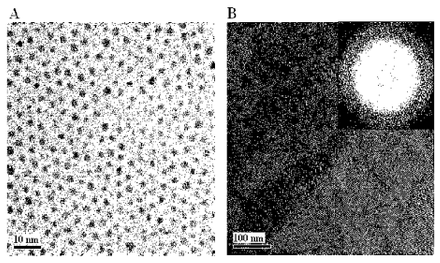
Nano-material

Appl. No. (Date)	**PCT / KR2011 / 004328** (2011-06-14) Core
Pub. No.	-
Title of the invention	T2 MRI contrast agent for cell contrast and preparation thereof
Inventors	HYEON, Taeghwan | LEE, Noh-Hyun | MOON, Woo-Kyung | CHOI, Seung-Hong | KIM, Hyung-Soo
Gist of the invention	T2 MRI contrast agent for cell contrast, comprising magnetic nanoparticles with ferrimagnetism at room temperature.
Figure	
Claim 1	T2 MRI contrast agent for cell contrast, comprising magnetic nanoparticles with ferrimagnetism at room temperature.
Related US patents	US7211331B | US7407527B | US7651967B | US7811545B | US7892315B | US7917966B | US7982870B | US8021640B | US8043702B | US8110170B | US8113811B | US8137521B | US8157986B | US20100040529A | US20100047564A | US20100047568A | US20100047570A | US20100047859A | US20100052223A | US20100140586A | US20100183858A | US20100184582A | US20100252807A | US20100267542A | US20100270265A | US20100273638A | US20100317502A | US20110098453A | US20110124008A | US20110159286A | US20110221431A | US20110300031A | US20110303869A | US20120064309A | US20120068389A

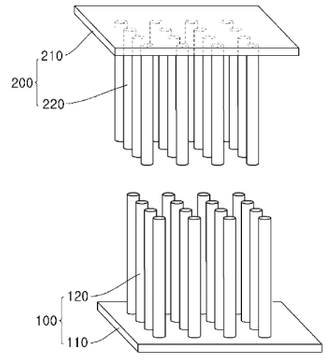
Appl. No. (Date)	**PCT / KR2010 / 002302** (2010-04-14)
Pub. No.	WO2010 / 120108
Title of the invention	Method for forming a microsphere having a structural color
Inventors	KWON, Sunghoon | KIM, Hyoki | YIN, Yadong | GE, Jianping
Gist of the invention	Forming a microsphere having a structural color, comprising: providing composition including magnetic nanoparticles dispersed in curing material; emulsifying with solvent; applying magnetic field; and curing.
Figure	
Claim 1	A method for forming a microsphere having a structural color, comprising: providing a composition for producing structural color, including a curing material and magnetic nanoparticles dispersed in the curing material; introducing the composition for producing structural color into an immiscible solvent to form an emulsion; applying a magnetic field to the emulsion to align the magnetic nanoparticles in the emulsion droplets of the curing material in a one-dimensional chain structure; and curing the emulsion droplets to immobilize the chain structure.
Related US patents	US7211331B | US7407527B | US7651967B | US7811545B | US7892315B | US7917966B | US7982870B | US8021640B | US8043702B | US8110170B | US8113811B | US8137521B | US8157986B | US20100040529A | US20100047564A | US20100047568A | US20100047570A | US20100047859A | US20100052223A | US20100140586A | US20100183858A | US20100184582A | US20100252807A | US20100267542A | US20100270265A | US20100273638A | US20100317502A | US20110098453A | US20110124008A | US20110159286A | US20110221431A | US20110300031A | US20110303869A | US20120064309A | US20120068389A

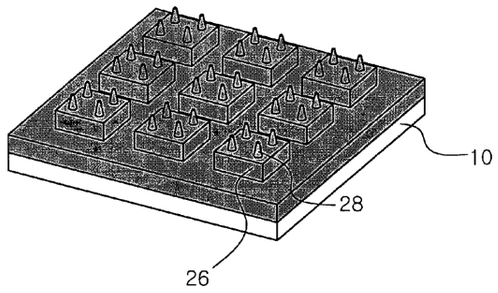
Appl. No. (Date)	**PCT / KR2010 / 002303** (2010-04-14)
Pub. No.	WO2010 / 120109
Title of the invention	Structural color producing method
Inventors	KWON, Sunghoon | KIM, Hyoki
Gist of the invention	A structural color printing method, comprising: forming composition layer comprising magnetic nanoparticles (120) and curing material (110) on a first substrate; applying magnetic field to express structural color; and curing to form structural color printing layer.
Figure	
Claim 1	A structural color printing method, comprising: providing a first substrate; applying a magnetic field to a composition layer for producing structural color to express structural color through a change in the lattice spacing of photonic crystals formed by magnetic nanoparticles according to an intensity of the magnetic field; and curing the composition layer for producing the structural color to immobilize the lattice spacing of the photonic crystals and to form a structural color printing layer.
Related US patents	US7211331B | US7407527B | US7651967B | US7811545B | US7892315B | US7917966B | US7982870B | US8021640B | US8043702B | US8110170B | US8113811B | US8137521B | US8157986B | US20100040529A | US20100047564A | US20100047568A | US20100047570A | US20100047859A | US20100052223A | US20100140586A | US20100183858A | US20100184582A | US20100252807A | US20100267542A | US20100270265A | US20100273638A | US20100317502A | US20110098453A | US20110124008A | US20110159286A | US20110221431A | US20110300031A | US20110303869A | US20120064309A | US20120068389A

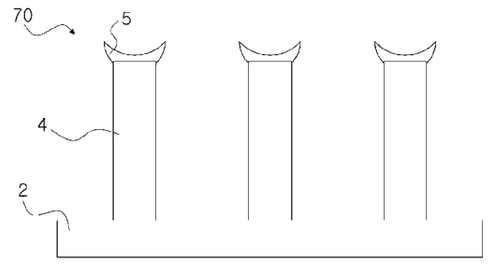
Nano-material

Appl. No. (Date)	**PCT / KR2011 / 002522** (2011-04-11)
Pub. No.	WO2011 / 129562
Title of the invention	Method for the mass production of silver nanoparticles having a uniform size
Inventors	HYEON, Taeghwan | PARK, Jinkyung
Gist of the invention	A method for mass production of silver nanoparticles having a uniform size, comprising: heating mixture of silver precursors and surfactants in inert atmosphere to produce silver nanoparticles, and isolating the silver nanoparticles.
Figure	
Claim 1	A method for the production of silver nanoparticles, comprising: (i) heating a mixture of silver precursors and surfactants in an inert atmosphere to produce silver nanoparticles; and (ii) isolating the silver nanoparticles.
Related US patents	US7211331B | US7407527B | US7651967B | US7811545B | US7892315B | US7917966B | US7982870B | US8021640B | US8043702B | US8110170B | US8113811B | US8137521B | US8157986B | US20100040529A | US20100047564A | US20100047568A | US20100047570A | US20100047859A | US20100052223A | US20100140586A | US20100183858A | US20100184582A | US20100252807A | US20100267542A | US20100270265A | US20100273638A | US20100317502A | US20110098453A | US20110124008A | US20110159286A | US20110221431A | US20110300031A | 20110303869A | 20120064309A | US20120068389A

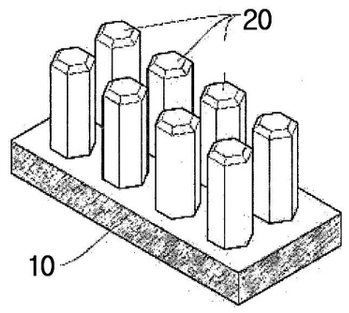
Nano-structure

Appl. No. (Date)	**PCT / KR2010 / 000899** (2010-02-12) Core
Pub. No.	WO2011 / 071212
Title of the invention	Dry-attachment fastening system and a method of use for the same
Inventors	SUH, Kahp Yang | KIM, Tae Il | PANG, Chang Hyun | BAE, Weon Gyu
Gist of the invention	A dry-attachment interlocking system, comprising: a first attachment member (100) having a first micro-cilia (120) formed on a first substrate (110); and a second attachment member (200) having a second micro-cilia (220) formed on a second substrate (210).
Figure	
Claim 1	A dry-attachment interlocking system, comprising: a first attachment member having a first micro-cilia formed on a first substrate; and a second attachment member having a second micro-cilia formed on a second substrate to exhibit an attachment force on contact with the first micro-cilia.
Related US patents	US6855481B | US7632417B | US7579050B | US20080044775A | US20100159229A | US20120034390A

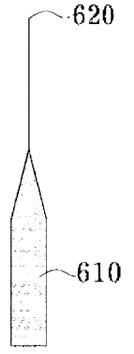
Appl. No. (Date)	**PCT / KR2009 / 002052** (2009-04-20)
Pub. No.	WO2010 / 123162
Title of the invention	Process for formation of hierarchical microstructure using partial curing
Inventors	SUH, Kahp Yang | JEONG, Hoon Eui | KAWK, No Kyun
Gist of the invention	Simplified formation of hierarchical microstructure, comprising: forming a first polymer pattern (26) having a partial curing layer (24); and forming a second polymer pattern (28) thereon using said partial curing layer.
Figure	
Claim 1	A process for the formation of a hierarchical microstructure using partial curing, comprising: forming a first polymer pattern having a partial curing layer; and forming a second polymer pattern on the first polymer pattern using said partial curing layer.
Related US patents	US6855481B | US7632417B | US7579050B | US20080044775A | US20100159229A | US20120034390A

Appl. No. (Date)	**PCT / KR2009 / 007737** (2009-12-23)
Pub. No.	WO2011 / 065621
Title of the invention	Miniature cilia structure for vacuum adhesion, and methods for usage and manufacture thereof
Inventors	SUH, Kahp Yang | JEONG, Hoon Eui | KWAK, Moon Kyu
Gist of the invention	A miniature cilia structure (70), comprising: a substrate (2); miniature cilia (4) on the substrate; and vacuum adhering portion (5) on the top end of each miniature cilium including a protrusion (6) to contact an object to be adhered on and a recess (8) for vacuum adhesion.
Figure	
Claim 1	A miniature cilia structure for vacuum adhesion, comprising: a substrate; miniature cilia formed on the substrate; and a vacuum adhering portion formed on the top end of each miniature cilium, and including a protrusion projecting from the miniature cilium to contact an object on which to adhere and a recess formed in the protrusion for vacuum adhesion.
Related US patents	US6855481B | US7632417B | US7579050B | US20080044775A | US20100159229A | US20120034390A

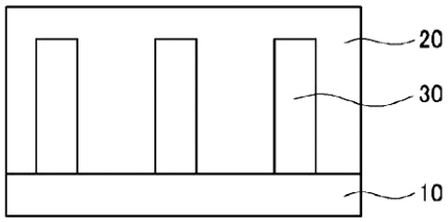
Nano-structure

Appl. No. (Date)	**PCT / KR2010 / 003354** (2010-05-27)
Pub. No.	WO2010 / 140789
Title of the invention	Nano device
Inventors	YI, Gyu-chul | KIM, Yong-Jin
Gist of the invention	Nano device in which one or more vertically grown nanostructures (20) formed on a carbon layer (10) including graphene of single layer and single crystal graphite of two or more layers.
Figure	
Claim 1	A nano device comprising: a carbon layer which has a honeycomb-shaped plane structure formed by interconnecting carbon atoms and comprises graphene of a single layer and single crystal graphite of two or more layers; and one or more nanostructures vertically grown on a plane of the carbon layer.
Related US patents	US6855481B | US7632417B | US7579050B | US20080044775A | US20100159229A | US20120034390A

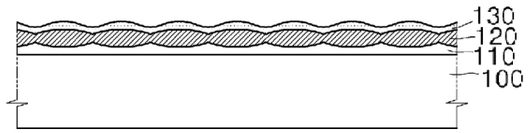
Nano-structure

Appl. No. (Date)	**PCT / KR2011 / 001250** (2011-02-23)
Pub. No.	WO2011 / 159012
Title of the invention	Conductive nanostructure, method for molding same, and method for manufacturing a field emitter using same
Inventors	KIM, Yong Hyup | KIM, Wal Jun
Gist of the invention	A Field-emitting nanostructure comprising: conductive substrate (610); conductive nanostructure (620) arranged thereon; and conductive interface compound formed in the interface between the conductive substrate and the conductive nanostructure.
Figure	
Claim 1	A field-emitting nanostructure comprising: a conductive substrate; a conductive nanostructure arranged on the conductive substrate; and a conductive interface compound disposed in the interface between the conductive substrate and the conductive nanostructure.
Related US patents	US6855481B | US7632417B | US7579050B | US20080044775A | US20100159229A | US20120034390A

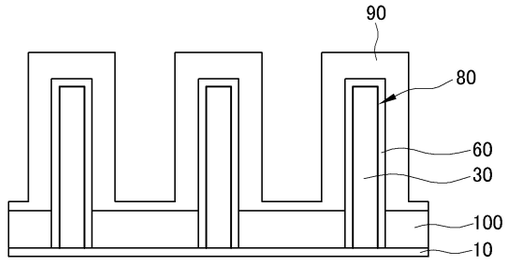
Solar cell

Appl. No. (Date)	**PCT / KR2011 / 007995** (2011-10-25) Core
Pub. No.	-
Title of the invention	Solar cell and manufacuring method thereof
Inventors	YI, Gyu-chul | HEO, Jae-Hyuk | KIM, Yong-Jin
Gist of the invention	Solar cell comprising: carbon structure layer (10); micro-structures (30) on the carbon structure layer; and thin film (20) comprising isolation-junction portion for electrical charge covering the micro-structures.
Figure	
Claim 1	Solar cell comprising: carbon structure layer; micro-structures formed on the carbon structure layer; and thin film comprising isolation-junction portion for electrical charge covering the micro-structures.
Related US patents	US20090183772A | US20110240112A | US20090178711A | US20110061717A

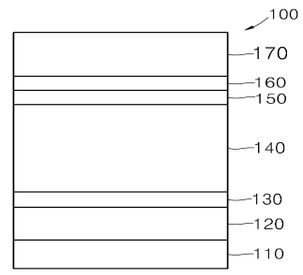
Solar cell

Appl. No. (Date)	**PCT / KR2011 / 001642** (2011-03-09)
Pub. No.	WO2012 / 039533
Title of the invention	Graphene structure, method of forming the graphene structure, and transparent electrode including the graphene structure
Inventors	KIM, Ki Bum | LEE, Hong Hie | KIM, Hyun Mi | CHO, Seong Yong
Gist of the invention	A method of forming graphene using an amorphous carbon layer comprising: forming amorphous carbon layer (110) on a substrate (100); forming graphitizing catalyst layer (120) thereon; and heating to crystallize the amorphous carbon layer, thereby forming graphene layer (130).
Figure	
Claim 1	A method of forming graphene, the method comprising: forming an amorphous carbon layer on a substrate; forming a graphitizing catalyst layer on the amorphous carbon layer; and heat treating the amorphous carbon layer and the graphitizing catalyst layer to crystallize the amorphous carbon layer, thereby forming a graphene layer on the graphitizing catalyst layer.
Related US patents	US20090183772A | US20110240112A | US20090178711A | US20110061717A

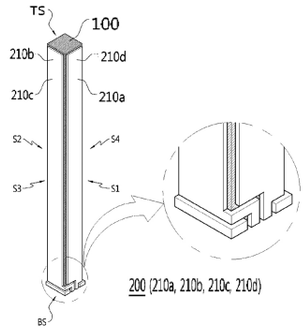
Solar cell

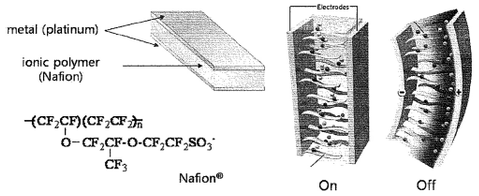
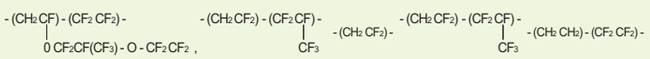
Appl. No. (Date)	**PCT / KR2011 / 007993** (2011-10-25)
Pub. No.	-
Title of the invention	Solar cell and manufacuring method thereof
Inventors	YI, Gyu-chul | KIM, Yong-Jin | LEE, Cheol-Ho
Gist of the invention	Solar cell comprising: carbon structure layer (10); micro-structures (30) on the carbon structure layer; and isolation layer (60) for electrical charge comprising isolation-junction portion (80) for electrical charge formed on a surface of the micro-structures.
Figure	
Claim 1	Solar cell comprising: carbon structure layer; micro-structures formed on the carbon structure layer; and isolation layer for electrical charge comprising isolation-junction portion for electrical charge, formed on a surface of the micro-structures.
Related US patents	US20090183772A | US20110240112A | US20090178711A | US20110061717A

Solar cell

Appl. No. (Date)	**PCT / KR2012 / 000953** (2012-02-09)
Pub. No.	-
Title of the invention	Thin film of low molecular weight with bulk hetero-junction and formation method for organic solar cell comprising the same
Inventors	KIM, Jang-Joo | KIM, Ji-Hwan | KIM, Hyo-Jeong
Gist of the invention	Preparation of thin film of low molecular-weight (MW) substance with bulk hetero-junction (BHJ) using alternate thermal deposition, comprising: providing first and second low MW substances into separate crucibles; and heating the crucibles while rotating substrate under vacuum to deposit alternately.
Figure	
Claim 1	A method of formation of thin film of low molecular weight substance with bulk hetero-junction (BHJ) comprising: providing a first low molecular weight substance and a second low molecular weight substance separately into crucibles of alternate thermal-deposition chamber, wherein the alternate thermal-deposition chamber comprises one or more crucibles for deposition, substrate stage opposing the crucibles, and separator extending from space between the crucibles to the substrate stage to separate a region of chamber; placing the substrate on the substrate stage of the chamber; and heating the crucibles for deposition while rotating the substrate under vacuum to deposit the first low molecular weight substance and the second low molecular weight substance alternately on the substrate.
Related US patents	US20090183772A | US20110240112A | US20090178711A | US20110061717A

Appl. No. (Date)	**PCT / KR2010 / 000534** (2010-01-29) Core
Pub. No.	WO2011 / 093542
Title of the invention	Polymer actuator, catheter containing same, and preparation method thereof
Inventors	HAN, Moonhee | JHO, Jaeyoung | LEE, Kyehan | LEE, Jangyeol | WANG, Hyucksik | YOON, Bye-ri
Gist of the invention	A polymer actuator comprising: (i) columnar electroactive polymer laminate; and (ii) a plurality of electrode coating layers on a part of the surface of the columnar laminate.
Claim 1	A polymer actuator for catheter comprising: (i) a columnar electroactive polymer laminate; and (ii) a plurality of electrode coating layers on a part of the surface of the columnar laminate, wherein the electroactive polymer is selected from the group consisting of ionic polymer, conductive polymer, carbon nanotube, dielectric polymer, electrostrictive polymer, nano-clay, silica compounds, and combinations thereof, wherein the ionic polymer is fluorine-based polymer into which at least one ionic group selected from the group consisting of sulfonic group and carbonyl group is introduced, where the fluorine-base polymer is selected from the following: $-(CH_2CF)-(CF_2CF_2)-$ (O $CF_2CF(CF_3)-O-CF_2CF_2$) , $-(CH_2CF_2)$, $-(CH_2CH_2)-(CF_2CF_2)$, $-(CH_2CF_2)-(CF_2CF)-(CF_2CF_2)-(CF_2CF)-$ (CF_3, CF_3) wherein the conductive polymer is selected from the group consisting of polyaniline, polypyrrole, polysulfone, polyacetylene and combinations thereof, wherein the dielectric polymer is selected from the group consisting of polyacrylate, silicones, polyvinylidenefluoride and combinations thereof, wherein the electrostrictive polymer is selected from the group consisting of polyacrylate, silicones, polyurethane and combinations thereof, wherein the nano-clay is one into which at least one selected from the group consisting of sulfonic group and carbonyl group is introduced, wherein the silica compound is silica monomer modified through sulfonication or carbonylation, or combination thereof, wherein the electrode is made from the material selected from the group consisting of Pt, Au, Cu, Ag, Ni, Pb, Cd and combinations thereof.
Related US patents	US7291689B | US7884152B | US7887736B | US8008375B | US20120009341A | US20110259830A | US20110097534A | US20100170649A | US20100044212A | US20080292667A | US20110031566A

Appl. No. (Date)	**PCT / KR2010 / 004201** (2010-06-29)
Pub. No.	WO2012 / 002588
Title of the invention	Electroactive-polymer actuator and method for manufacturing same
Inventors	AHN, Sung-Hoon | LEE, Gil-Yong | KIM, Hyung-jung | CHOI, Jung-Oh
Gist of the invention	An electroactive polymer actuator capable of continuous 3-dimensional morphing, comprising two or more pairs of surface electrodes (200) on the surface of an ion-exchange polymer material (100).
Figure	
Claim 1	An electroactive polymer actuator comprising: ion-exchange polymer material; and two or more pairs of surface electrodes formed on the surface of an ion-exchange polymer material separately from each other.
Related US patents	US7291689B | US7884152B | US7887736B | US8008375B | US20120009341A | US20110259830A | US20110097534A | US20100170649A | US20100044212A | US20080292667A | US20110031566A

Appl. No. (Date)	**PCT / KR2011 / 000483** (2011-01-24)
Pub. No.	–
Title of the invention	Electroactive polymer actuator, preparation method of the same and thrombolysis method using the same
Inventors	HAN, Moonhee | JHO, Jaeyoung | CHOI, Seung-Hong
Gist of the invention	An electroactive polymer actuator comprising: (i) columnar electroactive polymer laminate; (ii) a plurality of electrode coating layers on a part of surface of the columnar laminate; and (iii) encapsulation coating layer for encapsulating the electrode coating layers.
Figure	
Claim 1	A polymer actuator comprising: (i) a columnar electroactive polymer laminate; (ii) a plurality of electrode coating layers on a part of the surface of the columnar laminate; and (iii) encapsulation coating layer for encapsulating the electrode coating layers, wherein the electroactive polymer is selected from the group consisting of ionic polymer, conductive polymer, carbon nanotube, dielectric polymer, electrostrictive polymer, nano-clay, silica compounds, and combinations thereof, wherein the ionic polymer is fluorine-based polymer into which at least one ionic group selected from the group consisting of sulfonic group and carbonyl group is introduced, wherein the fluorine-base polymer is selected from the following:  wherein the conductive polymer is selected from the group consisting of polyaniline, polypyrrole, polysulfone, polyacetylene and combinations thereof, wherein the dielectric polymer is selected from the group

Claim 1	consisting of polyacrylate, silicones, polyvinylidenefluoride and combinations thereof, wherein the electrostrictive polymer is selected from the group consisting of polyacrylate, silicones, polyurethane and combinations thereof, wherein the nano-clay is one into which at least one selected from the group consisting of sulfonic group and carbonyl group is introduced, wherein the silica compound is silica monomer modified through sulfonication or carbonylation, or combination thereof, wherein the electrode is made from the material selected from the group consisting of Pt, Au, Cu, Ag, Ni, Pb, Cd and combinations thereof.
Related US patents	US7291689B | US7884152B | US7887736B | US8008375B | US20120009341A | US20110259830A | US20110097534A | US20100170649A | US20100044212A | US20080292667A | US20110031566A

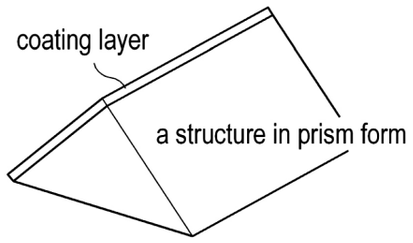
Functional polymer

Appl. No. (Date)	**PCT / KR2011 / 001499** (2011-03-04)
Pub. No.	-
Title of the invention	Polyester resin containing polycarbonate diol with excellent flexibility and preparation method thereof
Inventors	KIM, Hyun-Joong | MOON, Jae-Ik | LEE, Yong-Hee
Gist of the invention	Polyester resin with improved flexibility and formability prepared by reacting additionally polycarbonate diol after esterification.
Figure	No Image
Claim 1	A preparation method for polyeter resin containing polycarbonate diol, comprising: reacting dicarboxylic acid compounds and dihydroxy compounds in the stoichiometric ratio of 1:0.7 to 1:0.9 for esterification; and adding polycarbonate diol resin to the resultant in the amount of 15 to 50 weight percent of the total weight of the polyester resin.
Related US patents	US7291689B | US7884152B | US7887736B | US8008375B | US20120009341A | US20110259830A | US20110097534A | US20100170649A | US20100044212A | US20080292667A | US20110031566A

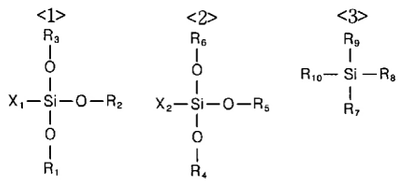
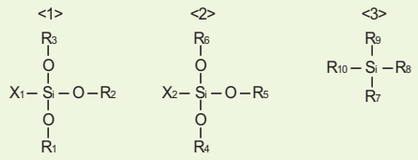
Functional polymer

Appl. No. (Date)	**PCT / KR2011 / 001501** (2011-03-04)
Pub. No.	-
Title of the invention	Self-healable polyester resin with excellent flexibility and elasticity and preparation method thereof
Inventors	KIM, Hyun-Joong | MOON, Jae-Ik | LEE, Yong-Hee
Gist of the invention	Polyester resin with improved elasticity and flexibility prepared by reacting polycarbonate diol after esterification using cyclohexane diol.
Figure	No Image
Claim 1	Preparation method for polyeter resin containing polycarbonate diol in the amount of 5 to 25 weight percent of the total weight of the polyester resin, comprising: reacting dicarboxylic acid compounds and dihydroxy compounds including cyclohexane diol in the stoichiometric ratio of 1:0.7 to 1:0.9 for esterification; and adding polycarbonate diol resin to the resultant in the amount of 15 to 50 weight percent of the total weight of the polyester resin.
Related US patents	US7291689B | US7884152B | US7887736B | US8008375B | US20120009341A | US20110259830A | US20110097534A | US20100170649A | US20100044212A | US20080292667A | US20110031566A

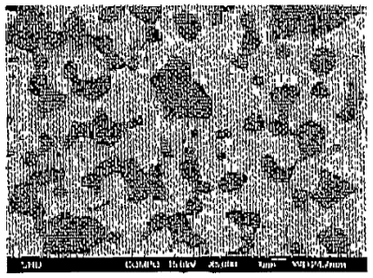
Functional polymer

Appl. No. (Date)	**PCT / KR2012 / 000387** (2010-06-29)
Pub. No.	-
Title of the invention	Optical film with an array of partial coating structure and preparation thereof
Inventors	CHA, Kook-Heon | YOON, Hyun-Shik | LEE, Hong-Hie | SUH, Kahp-Yang
Gist of the invention	Optical film with an array of structures on which a material having different refractive index, absorbancy or reflectivity from that of a surface of the structures is partially coated.
Figure	
Claim 1	An optical film comprising a substrate on which an array of structures is formed, wherein a material having a different refractive index, absorbancy or reflectivity from that of a surface of the structures is partially coated on the surface of the structures.
Related US patents	US7291689B | US7884152B | US7887736B | US8008375B | US20120009341A | US20110259830A | US20110097534A | US20100170649A | US20100044212A | US20080292667A | US20110031566A

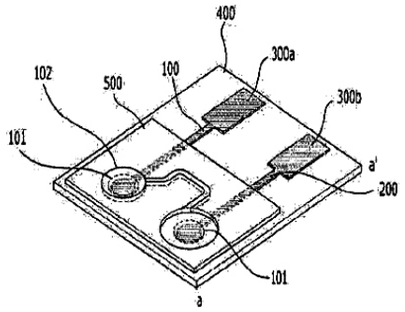
Etc.

Appl. No. (Date)	**PCT / KR2009 / 005056** (2009-09-07)
Pub. No.	WO2011 / 010771
Title of the invention	Resist for electron beam lithography, and method for developing resist for electron beam lithography
Inventors	YOON, Do-Yeung | KIM, Ki-Bum
Gist of the invention	Resist for electron beam lithography, comprising copolymer of three compounds (formula 1 to 3) with a large functional group bonded to Si atom and Mn of 500 to 30,000.
Figure	
Claim 1	A resist for electron beam lithography comprising copolymer which is formed by copolymerizing compound of following formula 1, compound of following formula 2 and compound of following formula 3 and has a number average molecular weight of 500-30,000:  wherein R1 to R6 in the formula 1 and 2 is selected from the group consisting of hydrogen, alkyl group of C1 to C5, X1 in the formula 1 is selected from the group consisting of hydrogen, hydroxy group, alkyl group of C1 to C5, alkoxy group of C1 to C5, haloalkylphenyl of C7 to C12, haloalkylphenyl of C8 to C18, X2 in the formula 2 is norbornyl group, norbornyl alkyl group of C8 to C13, norbornenyl, norbornenyl alkyl group of C8 to C13, R7 to R10 in the formula 3 is selected from the group consisting of alkoxy group of C1 to C5, halogen elements.

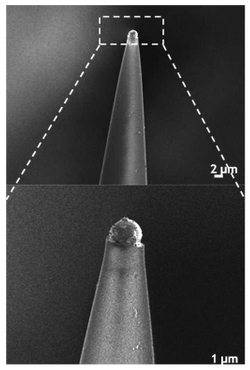
Etc.

Appl. No. (Date)	**PCT / KR2009 / 005529** (2009-09-28)
Pub. No.	WO2010 / 134671
Title of the invention	Metal composite powder, sintered body, and preparation method thereof
Inventors	KANG, Shin-Hoo
Gist of the invention	Composite powders of metals and carbides/ carbonitrides for structural materials with matrix phase metals of W or Mo and accessory phase metals of groups IV to VI in the periodic table, having an average particle size ≤ 1㎛.
Figure	
Claim 1	Composite powder for structural materials, having composition of $M_{1-x}\%M_2C$, $M_{1-x}\%(M_2,M_1)C$, $M_{1-x}\%M_2(CN)$, or $M_{1-x}\%(M_2,M_1)(CN)$, wherein a metal (M_1) of a matrix phase is selected from tungsten (W) or molybdenum (M_o) in the periodic table, and a metal (M_2) of an accessory phase is selected from a metal of groups IV to VI in the periodic table to form carbides or carbonitrides having an average particle size of 1 micrometer or less, and the matrix phase and the accessory phase coexist by reaction.
Related US patents	US20100184582A | US20100267542A | US20100273637A | US20100273638A | US20120063943A

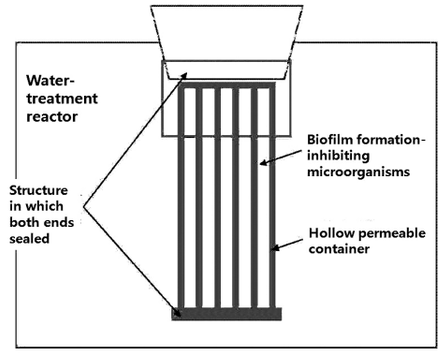
Etc.

Appl. No. (Date)	**PCT / KR2011 / 003573** (2011-05-13)
Pub. No.	WO2011 / 142636
Title of the invention	Reference electrode assembly and a pH meter using same
Inventors	CHUNG, Taek-Dong | PARK, Se-Jin | KIM, Hee-Chan | BOO, Han-Kil | NOH, Jong-Min
Gist of the invention	A reference electrode (100) assembly for detecting target substance in a sample by electrochemical method, comprising: porous transition metal electrode layer (101); and polyelectrolyte channel (102) disposed over the porous transition metal electrode layer.
Figure	
Claim 1	A reference electrode assembly used as a reference electrode in a measurement system for detecting a target substance in a sample by an electrochemical method, comprising: a porous transition metal electrode layer; and a channel disposed over the porous transition metal electrode layer, wherein the channel is formed by a polyelectrolyte.

Etc.

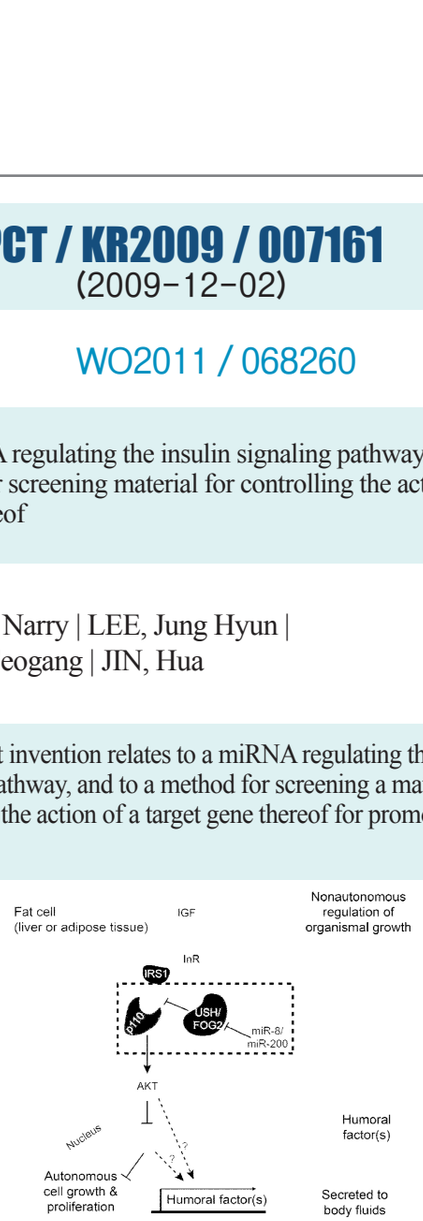
Appl. No. (Date)	**PCT / KR2011 / 002130** (2011-03-29)
Pub. No.	-
Title of the invention	Combined probe capable of monitoring, scanning and feedback stimulation both electrochemically and Raman-spectroscopically
Inventors	JEONG, Taek-Dong
Gist of the invention	A probe capable of acquiring electrochemical and spectroscopic information, comprising: (i) conductive capillary with conductive coating on its inner wall; and (ii) metallic micro-shell of spherical template with a first metallic coating on its surface, trapped in one end of the conductive capillary.
Figure	
Claim 1	A manufacturing process for probe, comprising: (a) coating a first metallic material onto surface of a spherical template to prepare a metallic micro-shell; (b) coating conductive substance onto inner wall of a capillary to prepare conductive capillary; (c) trapping the metallic micro-shell in one end of the conductive capillary; and (d) coating a second metallic material onto the inner wall of the conductive capillary with the micro-shell trapped therein.
Related US patents	US7814565B

Etc.

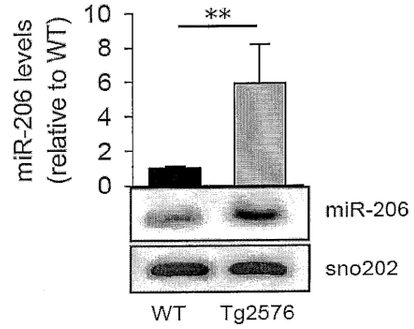
Appl. No. (Date)	**PCT / KR2011 / 007666** (2011-10-14)
Pub. No.	WO2012 / 050392
Title of the invention	Container in which biofilm formation-inhibiting microorganisms are immobilized, and water treatment apparatus using membrane using same
Inventors	LEE, Chung-Hak | OH, Hyun-Suk | KIM, Sang Ryoung | LEE, Jung-Kee | PARK, Son-Young
Gist of the invention	A permeable container with biofilm formation-inhibiting microorganisms immobilized therein for reducing membrane biofouling in membrane water treatment.
Figure	
Claim 1	A container in which biofilm formation inhibiting-microorganisms are immobilized, comprising: a permeable container; and biofilm formation inhibiting-microorganisms immobilized therein.
Related US patents	US7867392B


Biotechnology
1. Gene
2. Protein
3. Transformant
4. Pharmaceutical Composition
5. Diagnosis / Analysis
6. Etc.
DNA
DNA
DNA
DNA
DNA
DNA
DNA

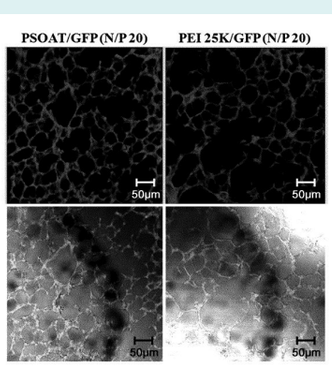
Gene

Appl. No. (Date)	**PCT / KR2009 / 007161** (2009-12-02) Core
Pub. No.	WO2011 / 068260
Title of the invention	MicroRNA regulating the insulin signaling pathway, and method for screening material for controlling the action of a target thereof
Inventors	KIM, Vic Narry | LEE, Jung Hyun | HYUN, Seogang | JIN, Hua
Gist of the invention	The present invention relates to a miRNA regulating the insulin signaling pathway, and to a method for screening a material for controlling the action of a target gene thereof for promoting cell growth.
Figure	
Claim 1	A method for screening an insulin signal transduction regulator, comprising the following steps: 1) treating a sample compound to the cell line expressing miR-200 family miRNA or miR-8 miRNA; 2) measuring the expression or activity of FOG2 or USH protein in the treated cell line of step 1); and 3) selecting a sample compound in which the expression or activity of FOG2 or USH protein in the cell line of step 1) that is different from that of the control.
Related US patents	US8088751B | US8066978B | US7728194B | US7217861B | US7001769B | US2007-0094744A | US2010-0105045A | US2010-0062051A | US2011-0154540A

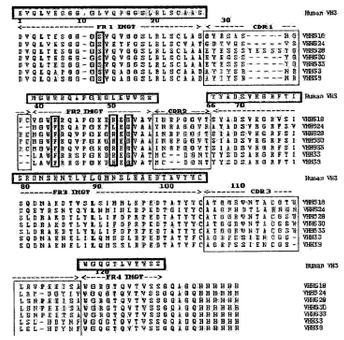
Gene

Appl. No. (Date)	**PCT / KR2011 / 006718** (2011-09-09) Core
Pub. No.	WO2012 / 036433
Title of the invention	Treatment of neurodegenerative diseases by targeting miRNA
Inventors	ROH, Jae-Kyu | LEE, Sang Kun | KIM, Man Ho | CHU, Kon | JUNG, Keun-Hwa | LEE, Soon-Tae
Gist of the invention	The antisense oligonucleotide of the present invention inhibits the function of miR-206 to greatly increase the levels of BDNF and IGF-1 and to increase the regeneration of synapses, thereby treating neurodegenerative diseases, particularly Alzheimer's disease.
Figure	
Claim 1	A pharmaceutical composition for preventing or treating neurodegenerative diseases comprising (a) pharmaceutically effective dose of the antisense oligonucleotide having the complementary sequence to the 2nd – 7th nucleotide sequences of SEQ. ID. NO: 1 and (b) pharmaceutically acceptable carriers.
Related US patents	US8088751B | US8066978B | US7728194B | US7217861B | US7001769B | US2007-0094744A | US2010-0105045A | US2010-0062051A | US2011-0154540A

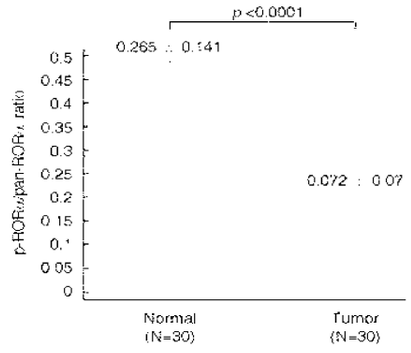
Gene

Appl. No. (Date)	**PCT / KR2011 / 005955** (2011-08-12)
Pub. No.	-
Title of the invention	Polysorbitol-based osmotically active transporter and gene therapy using the same as gene carrier
Inventors	CHO, Myung Haing | CHO, Chong Su
Gist of the invention	The present invention relates to a biodegradable polysorbitol-based osmotically active transporter (PSOAT) and a method of gene therapy using the same as a gene delivery carrier.
Figure	
Claim 1	A biodegradable polysorbitol-based osmotically active transporter (PSOAT) which is the copolymer of polyethyleneimine (PEI) and sorbitol-based derivative.
Related US patents	US8088751B | US8066978B | US7728194B | US7217861B | US7001769B | US2007-0094744A | US2010-0105045A | US2010-0062051A | US2011-0154540A

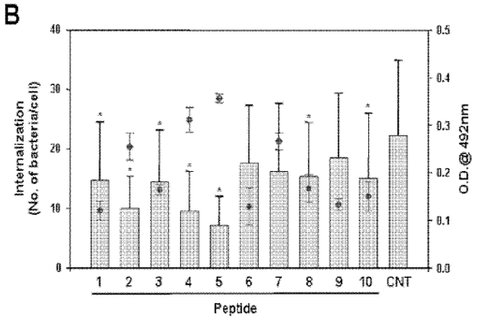
Protein

Appl. No. (Date)	**PCT / KR2010 / 006295** (2010-09-15) Core
Pub. No.	WO2011 / 099684
Title of the invention	Single domain antibody against MUC1
Inventors	SEONG, Seung-Yong | CHO, Nam-Hyuk | CHOI, Shin Kyu | CHANG, Soog Hee | YUAN, Hai Ying | NA, Hye Young | MOON, Hye Jung | CHO, Sung Eun
Gist of the invention	The present invention relates to a single domain antibody (nanoscale antibody or NanoMAb) comprising CDRs of MUC1 for the treatment or dignosis of cancer.
Figure	
Claim 1	A single domain antibody specific to MUC1 (mucin antigen 1) comprising a heavy chain variable region comprising the amino acid sequence of one of the following CDRs (complementarity determining regions): CDR1 selected from the group consisting of amino acid sequences represented by SEQ. ID. NOs: 24 – NO: 30, CDR2 selected from the group consisting of amino acid sequences represented by SEQ. ID. NOs: 31 – NO: 37, and CDR3 selected from the group consisting of amino acid sequences represented by SEQ. ID. NOs: 38 – NO: 44.
Related US patents	US8124358B | US7982098B | US7517654B | US7476540B | US6548060B | US2012-0015886A | US2011-0256119A | US2011-0230367A | US2011-0162092A | US2010-0298536A | US2010-0021463A | US2010-0036122A | US2011-0189195A

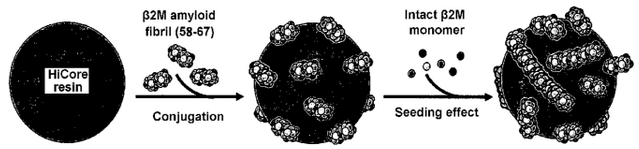
Protein

Appl. No. (Date)	**PCT / KR2010 / 009358** (2010-12-27) Core
Pub. No.	WO2011 / 087222
Title of the invention	Anticancer peptide sequence
Inventors	BAEK, Sung-Hee | KIM, Keun ll | LEE, Ji Min
Gist of the invention	The present invention relates to an anticancer peptide originating from a RORα derivative. The anticancer peptide can be used to treat and prevent cancer, particularly prostate cancer and colorectal cancer.
Figure	
Claim 1	An anticancer peptide or its functional equivalent comprising the 31st to the 40th amino acids of the sequence represented by SEQ. ID. NO: 1 wherein the 35th serine is phosphorylated.
Related US patents	US8124358B | US7982098B | US7517654B | US7476540B | US6548060B | US2012-0015886A | US2011-0256119A | US2011-0230367A | US2011-0162092A | US2010-0298536A | US2010-0021463A | US2010-0036122A | US2011-0189195A

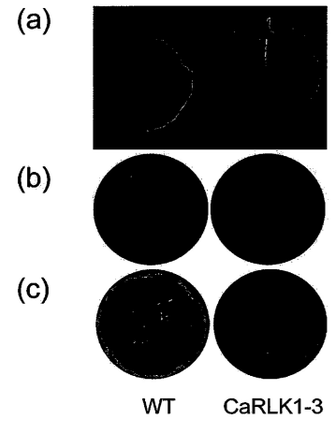
Protein

Appl. No. (Date)	**PCT / KR2010 / 005379** (2010-08-16)
Pub. No.	WO2011 / 108785
Title of the invention	Peptide compound having inhibitory activity for infection or proliferation of Orientia tsutsugamushi, and pharmaceutical composition for relieving scrub typhus using same
Inventors	CHO, Nam-Hyuk | KIM, Ik-Sang | CHOI, Myung-Sik
Gist of the invention	The present invention relates to a peptide compound which is prepared on the basis of a C-terminal sequence of TSA56 of Orientia tsutsugamushi, and a pharmaceutical composition for relieving scrub typhus using the same.
Figure	
Claim 1	A peptide compound having an inhibitory activity for the infection or proliferation of Orientia tsutsugamushi selected from the compounds of (1) and (2) or pharmaceutically acceptable salts thereof: (1) A peptide compound having the amino acid sequence represented by SEQ. ID. NO: 1; and (2) A peptide compound having the sequence similar to the amino acid sequence represented by SEQ. ID. NO: 1.
Related US patents	US8124358B | US7982098B | US7517654B | US7476540B | US6548060B | US2012-0015886A | US2011-0256119A | US2011-0230367A | US2011-0162092A | US2010-0298536A | US2010-0021463A | US2010-0036122A | US2011-0189195A

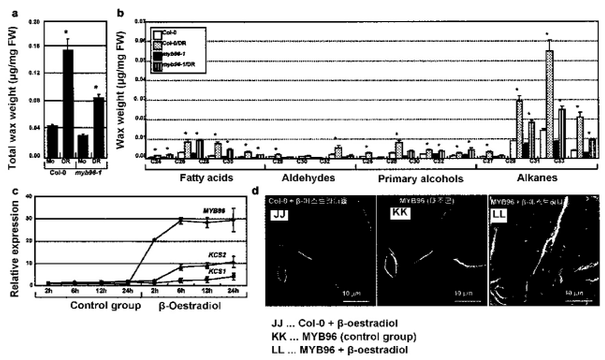
Protein

Appl. No. (Date)	**PCT / KR2011 / 001909** (2011-03-21)
Pub. No.	WO2011 / 115462
Title of the invention	Seed-conjugated solid support resin, and method for removing β2-microglobulin by using same
Inventors	LEE, Yoon-Sik | PAIK, Seung-Ryeoul | KANG, Sungsoo
Gist of the invention	The present invention relates to a method for removing β2-microglobulin (β2M) in blood at a neutral pH by using a fibril of a peptide having the 58th to 67th amino acid sequence of β2M.
Figure	
Claim 1	A peptide comprising the amino acid sequence represented by SEQ. ID. NO: 1.
Related US patents	US8124358B | US7982098B | US7517654B | US7476540B | US6548060B | US2012-0015886A | US2011-0256119A | US2011-0230367A | US2011-0162092A | US2010-0298536A | US2010-0021463A | US2010-0036122A | US2011-0189195A

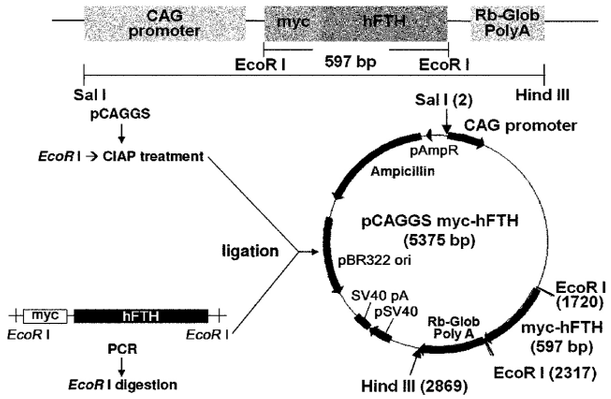
Transformant

Appl. No. (Date)	**PCT / KR2009 / 007186** (2009-12-03) Core
Pub. No.	WO2011 / 068261
Title of the invention	Gene which enhances resistance to plant pathogens and use thereof
Inventors	CHOI, Do Il | LEE, Dong Ju
Gist of the invention	The present invention relates to a Capsicum annuum-derived CaRLK1 for enhancing resistance to plant pathogens.
Figure	
Claim 1	A Capsicum annuum-derived CaRLK1 (Capsicum annuum Receptor-like Kinase 1) protein consisting of the amino acid sequence represented by SEQ. ID. NO: 2.
Related US patents	US8124832B | US2010-0269215A

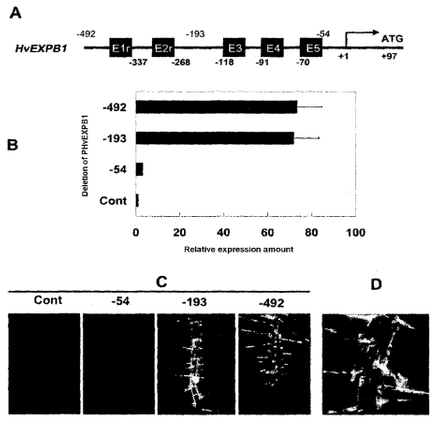
Transformant

Appl. No. (Date)	**PCT / KR2011 / 000018** (2011-01-04)
Pub. No.	WO2012 / 074165
Title of the invention	Arabidopsis-thaliana-derived MYB96 gene and a use therefor
Inventors	PARK, Chung Mo | SEO, Pil Joon
Gist of the invention	The present invention relates to a method for increasing biosynthesis of epicuticular wax of a plant through over-expression of MYB96 gene in a plant cell.
Figure	
Claim 1	A method for increasing biosynthesis of epicuticular wax of a plant comprising the step of over-expressing MYB96 gene by transfecting a plant cell with a recombination vector comprising Arabidopsis thaliana-originated MYB96 (myb domain protein 96) gene.
Related US patents	US8124832B | US2010-0269215A

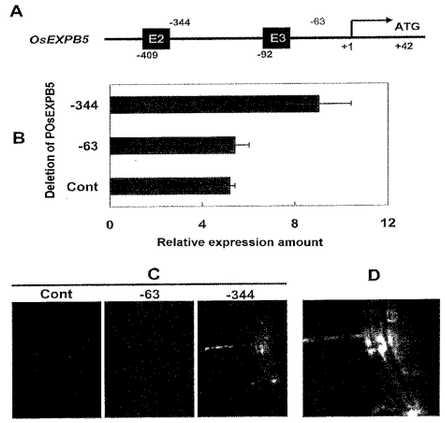
Transformant

Appl. No. (Date)	**PCT / KR2011 / 004983** (2011-07-07)
Pub. No.	WO2012 / 005529
Title of the invention	Transgenic mice expressing human ferritin in a manner non-specific to tissue, and use thereof
Inventors	MOON, Woo Kyung | KIM, Hoe Suk
Gist of the invention	The present invention relates to a recombinant vector and to transgenic mice expressing human ferritin in a manner non-specific to tissue.
Figure	
Claim 1	A recombinant vector for the expression of human ferritin in a manner non-specific to tissues, wherein a promoter comprising a cytomegalovirus early enhancer element and a β-actin promoter is operably linked to a human ferritin gene.
Related US patents	US8124832B | US2010-0269215A

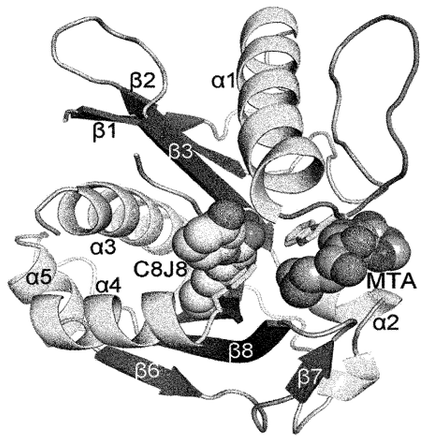
Transformant

Appl. No. (Date)	**PCT / KR2011 / 005563** (2011-07-28)
Pub. No.	WO2012 / 030072
Title of the invention	Root hair-specific expression promoter derived from EXPB1 gene of barley and use thereof
Inventors	CHO, Hyung Taeg
Gist of the invention	The present invention relates to a root hair-specific expression promoter derived from EXPB1 gene of barley and to a use thereof.
Figure	
Claim 1	A plant root hair-specific expression promoter comprising 488th – 755th base of the nucleotide sequence represented by SEQ. ID. NO: 1.
Related US patents	US8124832B | US2010-0269215A

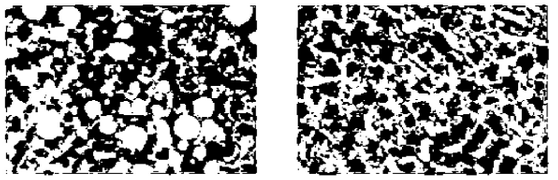
Transformant

Appl. No. (Date)	**PCT / KR2011 / 005565** (2011-07-28)
Pub. No.	WO2012 / 030073
Title of the invention	Root hair-specific expression promoter derived from EXPB5 gene of rice and use thereof
Inventors	CHO, Hyung Taeg
Gist of the invention	The present invention relates to a root hair-specific expression promoter derived from EXPB5 gene of rice and a use thereof.
Figure	
Claim 1	A plant root hair-specific expression promoter comprising 1633rd – 2015th base of the nucleotide sequence represented by SEQ. ID. NO: 1.
Related US patents	US8124832B | US2010-0269215A

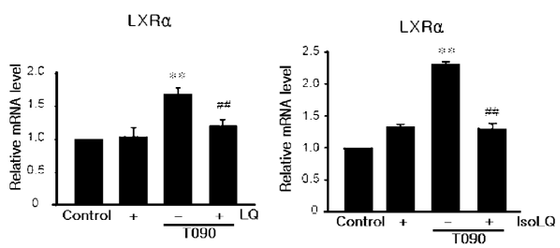
Transformant

Appl. No. (Date)	**PCT / KR2011 / 006797** (2011-09-15)
Pub. No.	WO2012 / 039559
Title of the invention	TofI variant proteins and method for producing the same
Inventors	RHEE, Sang Kee | CHUNG, Ji Woung | YU, Sang Heon
Gist of the invention	The present invention discloses a TofI variant in which both the histidine (His) at position 91 and the proline (Pro) at position 92 are deleted from a wild-type TofI.
Figure	
Claim 1	A TofI variant protein, devoid of both histidine (His) at position 91 and proline (Pro) at position 92 in an amino acid sequence of SEQ ID NO: 1.
Related US patents	US8124832B | US2010-0269215A

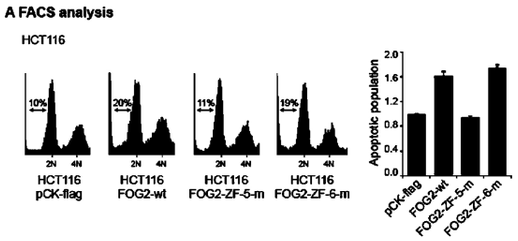
Pharmaceutical Composition

Appl. No. (Date)	**PCT / KR2010 / 001204** (2010-02-25) Core
Pub. No.	WO2011 / 105643
Title of the invention	Selenalzole derivative having ligand which activates peroxisome proliferator activated receptor (PPAR), preparing method thereof and usage of the chemical compounds
Inventors	KANG, Heonjoong | CHIN, Jungwook | LEE, Jaehwan
Gist of the invention	The present invention relates to a new selenazole derivative which activates a peroxisome proliferator activated receptor (PPAR) for treatment of obesity, hyperlipedemia, fatty liver, arterosclerosis and diabetes mellitus.
Figure	
Claim 1	A selenazole derivative represented by the following formula 1, hydrates thereof, solvates thereof, stereo isomers thereof, or pharmaceutically acceptable salts thereof.
Related US patents	US8158170B | US7982050B | US7960345B | US7902165B | US7897722B | US7528276B | US7067508B | US6180599B | US6566399B | US2012-0088731A | US2012-0083472A | US2012-0029177A | US2011-0274707A | US2011-0250193A | US2011-0218240A | US2011-0152524A | US2011-0123538A | US2011-0105622A | US2011-0028741A | US2010-0267684A | US2010-0105763A | US2010-0104590A | US2010-0041723A | US2009-0326015A | US2007-0055072A | US2009-0054493A | US2011-0038799A | US2011-0124607A | US2011-0152379A | US2011-0150899A | US2011-0230826A

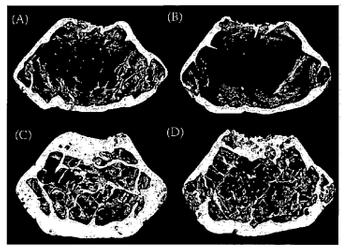
Pharmaceutical Composition

Appl. No. (Date)	**PCT / KR2011 / 001150** (2011-02-22) Core
Pub. No.	WO2011 / 102695
Title of the invention	Composition for preventing or treating diseases caused by over-expression of LXRα, containing liquiritigenin or isoliquiritigenin as active ingredient
Inventors	KIM, Sang Geon | KIM, Sang Chan | KIM, Young Woo
Gist of the invention	The present invention relates to a composition for preventing, relieving and treating diseases caused by expression or over-activation of LXRα or SREBP-1 such as fatty liver, hypertriglyceridemia, hyperreninemia, renin-induced hypertension, aldosteronism, adrenoleukodystrophy, glomerulosclerosis, proteinuria, renal failure, and the like.
Figure	
Claim 1	A pharmaceutical composition for preventing or treating diseases caused by over-expression or over-activation of LXRα (liver X receptor α) or SREBP-1 (Sterol Response Element Binding Protein-1) comprising one or more selected from the group consisting of liquiritigenin, isoliquiritigenin, a Glycyrrhizae Radix extract fraction extract comprising the same, pharmaceutically acceptable salts thereof and hydrates thereof as an active ingredient.
Related US patents	US8158170B | US7982050B | US7960345B | US7902165B | US7897722B | US7528276B | US7067508B | US6180599B | US6566399B | US2012-0088731A | US2012-0083472A | US2012-0029177A | US2011-0274707A | US2011-0250193A | US2011-0218240A | US2011-0152524A | US2011-0123538A | US2011-0105622A | US2011-0028741A | US2010-0267684A | US2010-0105763A | US2010-0104590A | US2010-0041723A | US2009-0326015A | US2007-0055072A | US2009-0054493A | US2011-0038799A | US2011-0124607A | US2011-0152379A | US2011-0150899A | US2011-0230826A

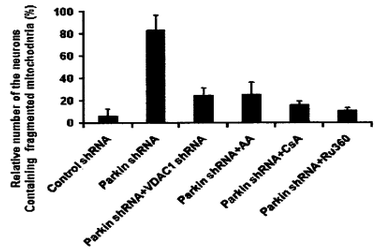
Pharmaceutical Composition

Appl. No. (Date)	**PCT / KR2010 / 003667** (2010-06-08)
Pub. No.	WO2011 / 155643
Title of the invention	Phosphatidylinositol 3-kinases activity regulator including the fifth zinc finger domain of FOG2
Inventors	KIM, Vic Narry | LEE, Jung Hyun
Gist of the invention	The present invention relates to a phosphatidylinositol 3-kinase activity regulator comprising the fifth zinc finger domain of FOG2 capable of inducing cancer cells to die.
Figure	
Claim 1	An isolated polypeptide comprising the fifth zinc finger domain of FOG2 (Friend of GATA2).
Related US patents	US8158170B | US7982050B | US7960345B | US7902165B | US7897722B | US7528276B | US7067508B | US6180599B | US6566399B | US2012-0088731A | US2012-0083472A | US2012-0029177A | US2011-0274707A | US2011-0250193A | US2011-0218240A | US2011-0152524A | US2011-0123538A | US2011-0105622A | US2011-0028741A | US2010-0267684A | US2010-0105763A | US2010-0104590A | US2010-0041723A | US2009-0326015A | US2007-0055072A | US2009-0054493A | US2011-0038799A | US2011-0124607A | US2011-0152379A | US2011-0150899A | US2011-0230826A

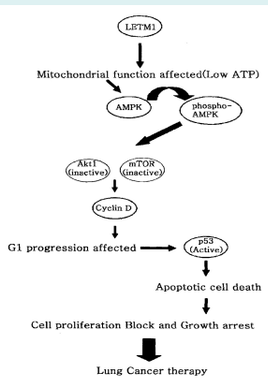
Pharmaceutical Composition

Appl. No. (Date)	**PCT / KR2010 / 005890** (2010-08-31)
Pub. No.	WO2011 / 132826
Title of the invention	Transdermal drug delivery system and pharmaceutical composition for preventing or treating bone diseases
Inventors	PARK, Jong Sang | NAM, So Hee
Gist of the invention	A transdermal drug delivery system comprising (i) a bisphosphonate-based drug and (ii) a cationic amine compound linked to the bisphosphonate-based drug via an ionic bond, and a pharmaceutical composition comprising the drug delivery system for preventing or treating a bone disease.
Figure	
Claim 1	A transdermal drug delivery system, comprising (i) a bisphosphonate-based drug; and (ii) a cationic amine compound linked to the bisphosphonate-based drug via an ionic bond.
Related US patents	US8158170B | US7982050B | US7960345B | US7902165B | US7897722B | US7528276B | US7067508B | US6180599B | US6566399B | US2012-0088731A | US2012-0083472A | US2012-0029177A | US2011-0274707A | US2011-0250193A | US2011-0218240A | US2011-0152524A | US2011-0123538A | US2011-0105622A | US2011-0028741A | US2010-0267684A | US2010-0105763A | US2010-0104590A | US2010-0041723A | US2009-0326015A | US2007-0055072A | US2009-0054493A | US2011-0038799A | US2011-0124607A | US2011-0152379A | US2011-0150899A | US2011-0230826A

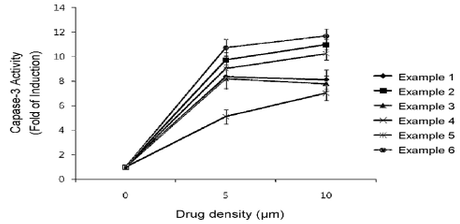
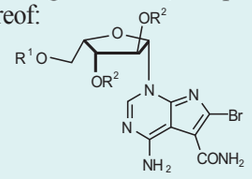
Pharmaceutical Composition

Appl. No. (Date)	**PCT / KR2010 / 007052** (2010-10-14)
Pub. No.	WO2012 / 046902
Title of the invention	Method for treating parkinson's disease through the control of the VDAC1 protein
Inventors	CHUNG, Jongkyeong | KIM, Yongsung
Gist of the invention	The present invention relates to a pharmaceutical composition for treating Parkinson's disease including a VDAC1 protein controller. The present invention is expected to be capable of providing a method for fundamentally treating Parkinson's disease by preventing abnormal mitochondrial function and/or restoring same.
Figure	
Claim 1	A pharmaceutical composition for treating Parkinson's disease including a VDAC1 (voltage-dependent anion channel 1) protein controller.
Related US patents	US8158170B | US7982050B | US7960345B | US7902165B | US7897722B | US7528276B | US7067508B | US6180599B | US6566399B | US2012-0088731A | US2012-0083472A | US2012-0029177A | US2011-0274707A | US2011-0250193A | US2011-0218240A | US2011-0152524A | US2011-0123538A | US2011-0105622A | US2011-0028741A | US2010-0267684A | US2010-0105763A | US2010-0104590A | US2010-0041723A | US2009-0326015A | US2007-0055072A | US2009-0054493A | US2011-0038799A | US2011-0124607A | US2011-0152379A | US2011-0150899A | US2011-0230826A

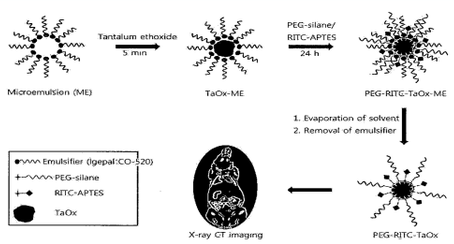
Pharmaceutical Composition

Appl. No. (Date)	**PCT / KR2010 / 007547** (2010-10-29)
Pub. No.	WO2011 / 108796
Title of the invention	Composition for preventing or treating cancer, containing LETM1
Inventors	CHO, Myung Haing
Gist of the invention	The present invention relates to a composition for preventing or treating cancer comprising LETM1 or a gene encoding the same, and the composition can be used as a successful therapeutic approach for inhibiting the proliferation and progression of cancer.
Figure	
Claim 1	A composition for preventing or treating cancer comprising leucine zipper/EF hand-containing transmembrane protein 1 (LETM1) or a gene encoding the same.
Related US patents	US8158170B | US7982050B | US7960345B | US7902165B | US7897722B | US7528276B | US7067508B | US6180599B | US6566399B | US2012-0088731A | US2012-0083472A | US2012-0029177A | US2011-0274707A | US2011-0250193A | US2011-0218240A | US2011-0152524A | US2011-0123538A | US2011-0105622A | US2011-0028741A | US2010-0267684A | US2010-0105763A | US2010-0104590A | US2010-0041723A | US2009-0326015A | US2007-0055072A | US2009-0054493A | US2011-0038799A | US2011-0124607A | US2011-0152379A | US2011-0150899A | US2011-0230826A

Pharmaceutical Composition

Appl. No. (Date)	**PCT / KR2010 / 007650** (2010-11-02)
Pub. No.	WO2012 / 060482
Title of the invention	CDK-inhibiting pyrrolopyrimidinone carboxamide derivative or pharmaceutically acceptable salt thereof, and pharmaceutical composition containing same as active ingredient for preventing or treating liver cell cancer
Inventors	LEE, Seung Ki | KIM, Byeong Moon | CHO, Seung Ju | KIM, Young Jong
Gist of the invention	A CDK-inhibiting pyrrolopyrimidinone carboxamide derivative or a pharmaceutically acceptable salt thereof, and a pharmaceutical composition containing same as an active ingredient for preventing or treating liver cell cancer.
Figure	
Claim 1	A pyrrolopyrimidinone carboxamide derivative represented by the following Formual 1, or a pharmaceutically acceptable salt thereof:  [Formula 1]
Related US patents	US8158170B | US7982050B | US7960345B | US7902165B | US7897722B | US7528276B | US7067508B | US6180599B | US6566399B | US2012-0088731A | US2012-0083472A | US2012-0029177A | US2011-0274707A | US2011-0250193A | US2011-0218240A | US2011-0152524A | US2011-0123538A | US2011-0105622A | US2011-0028741A | US2010-0267684A | US2010-0105763A | US2010-0104590A | US2010-0041723A | US2009-0326015A | US2007-0055072A | US2009-0054493A | US2011-0038799A | US2011-0124607A | US2011-0152379A | US2011-0150899A | US2011-0230826A

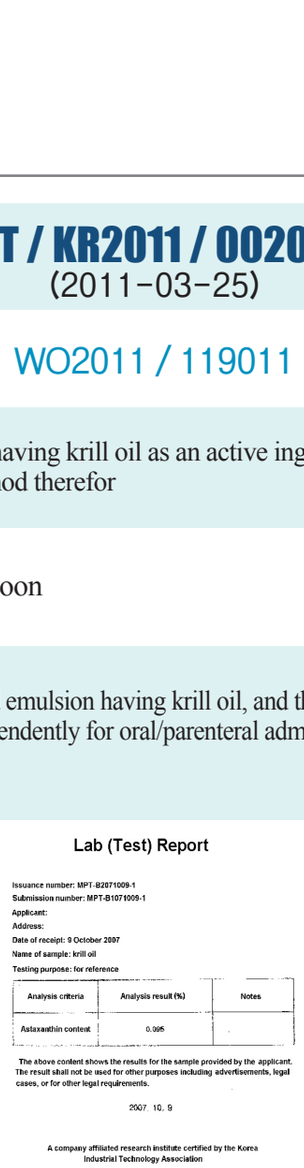
Pharmaceutical Composition

Appl. No. (Date)	**PCT / KR2011 / 001165** (2011-02-22)
Pub. No.	WO2011 / 105736
Title of the invention	Surface-modified tantalum oxide nanoparticles, preparation method thereof, and contrast medium for X-ray computed tomography and highly dielectric thin film using same
Inventors	HYEON, Taeghwan | OH, Myoung Hwan
Gist of the invention	The present invention relates to surface-modified tantalum oxide nanoparticles and a contrast medium for X-ray computed tomography and a highly dielectric thin film using the same.
Figure	
Claim 1	A preparation method of surface-modified tantalum oxide nanoparticles comprising the following steps: (i) adding an aqueous phase containing water to an organic solvent containing a surfactant to prepare a water-in-oil micro-emulsion; (ii) introducing a tantalum precursor to the micro-emulsion; (iii) adding a surface modifying agent containing an organic silane group or a phosphine group to the solution obtained in step (ii); (iv) removing the organic solvent from the reaction product of step (iii); and (v) separating surface-modified tantalum oxide nanoparticles from the mixture obtained in step (iv).
Related US patents	US8158170B | US7982050B | US7960345B | US7902165B | US7897722B | US7528276B | US7067508B | US6180599B | US6566399B | US2012-0088731A | US2012-0083472A | US2012-0029177A | US2011-0274707A | US2011-0250193A | US2011-0218240A | US2011-0152524A | US2011-0123538A | US2011-0105622A | US2011-0028741A | US2010-0267684A | US2010-0105763A | US2010-0104590A | US2010-0041723A | US2009-0326015A | US2007-0055072A | US2009-0054493A | US2011-0038799A | US2011-0124607A | US2011-0152379A | US2011-0150899A | US2011-0230826A

Pharmaceutical Composition

Appl. No. (Date)	**PCT / KR2011 / 002094** (2011-03-25)
Pub. No.	WO2011 / 122805
Title of the invention	A composition comprising ajoene for preventing or treating a disease caused by overexpression of LXR-alpha
Inventors	KIM, Sang Geon | RYU, Jae Ha | JEON, Ra Ok | HAN, Chang Yeob
Gist of the invention	The present invention is related to a composition comprising the ajoene-abundant garlic extract or ajoene isolated therefrom for treating or preventing the disease caused by over-expression or hyper-activation of LXR-alpha or SREBP-1.
Figure	No Image
Claim 1	A pharmaceutical composition comprising the ajoene-abundant garlic extract or ajoene isolated therefrom as an active ingredient for treating or preventing the disease caused by over-expression or hyper-activation of LXR-alpha or SREBP-1, together with a pharmaceutically acceptable carrier.
Related US patents	US8158170B | US7982050B | US7960345B | US7902165B | US7897722B | US7528276B | US7067508B | US6180599B | US6566399B | US2012-0088731A | US2012-0083472A | US2012-0029177A | US2011-0274707A | US2011-0250193A | US2011-0218240A | US2011-0152524A | US2011-0123538A | US2011-0105622A | US2011-0028741A | US2010-0267684A | US2010-0105763A | US2010-0104590A | US2010-0041723A | US2009-0326015A | US2007-0055072A | US2009-0054493A | US2011-0038799A | US2011-0124607A | US2011-0152379A | US2011-0150899A | US2011-0230826A

Pharmaceutical Composition

Appl. No. (Date)	**PCT / KR2011 / 002096** (2011-03-25)
Pub. No.	WO2011 / 119011
Title of the invention	Lipid emulsion having krill oil as an active ingredient and preparation method therefor
Inventors	SHIN, Wan Gyoon
Gist of the invention	Provided is a lipid emulsion having krill oil, and the lipid emulsion can be used independently for oral/parenteral administration or as a daily nutrient.
Figure	
Claim 1	A lipid emulsion comprising krill oil extracted from krill shrimp as an active ingredient.
Related US patents	US8158170B | US7982050B | US7960345B | US7902165B | US7897722B | US7528276B | US7067508B | US6180599B | US6566399B | US2012-0088731A | US2012-0083472A | US2012-0029177A | US2011-0274707A | US2011-0250193A | US2011-0218240A | US2011-0152524A | US2011-0123538A | US2011-0105622A | US2011-0028741A | US2010-0267684A | US2010-0105763A | US2010-0104590A | US2010-0041723A | US2009-0326015A | US2007-0055072A | US2009-0054493A | US2011-0038799A | US2011-0124607A | US2011-0152379A | US2011-0150899A | US2011-0230826A

Lab (Test) Report

Issuance number: MPT-B2071009-1
Submission number: MPT-B1071009-1
Applicant:
Address:
Date of receipt: 9 October 2007
Name of sample: krill oil
Testing purpose: for reference

Analysis criteria	Analysis result (%)	Notes
Astaxanthin content	0.005	

The above content shows the results for the sample provided by the applicant. The result shall not be used for other purposes including advertisements, legal cases, or for other legal requirements.

2007. 10. 9

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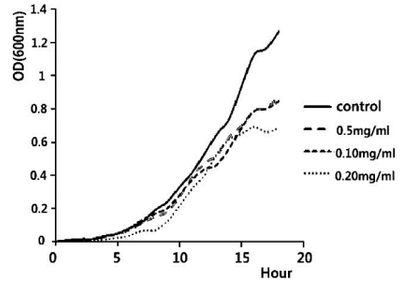
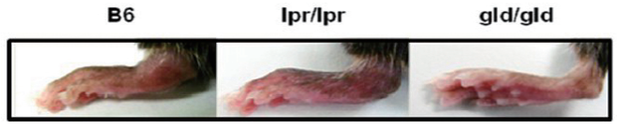
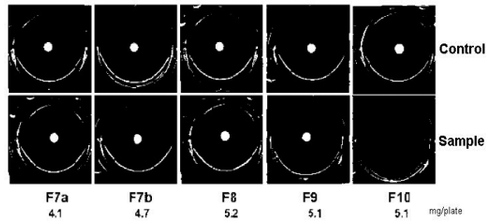
Pharmaceutical Composition

Appl. No. (Date)	**PCT / KR2011 / 002292** (2011-04-01)
Pub. No.	-
Title of the invention	Artificial saliva comprising hyaluronic acid
Inventors	KHO, Hong Seop | PARK, Moon Soo
Gist of the invention	Provided is artificial saliva including hyaluronic acid (HA) useful for the treatment of xerostomia or oral candidiasis.
Figure	
Claim 1	Artificial saliva comprising 0.4 to 0.6 mg/ml of hyaluronic acid (HA), comprising; based on 100 parts by weight of the HA, 10 to 12 parts by weight of lysozyme, and 7 to 9 parts by weight of peroxidase.
Related US patents	US8158170B | US7982050B | US7960345B | US7902165B | US7897722B | US7528276B | US7067508B | US6180599B | US6566399B | US2012-0088731A | US2012-0083472A | US2012-0029177A | US2011-0274707A | US2011-0250193A | US2011-0218240A | US2011-0152524A | US2011-0123538A | US2011-0105622A | US2011-0028741A | US2010-0267684A | US2010-0105763A | US2010-0104590A | US2010-0041723A | US2009-0326015A | US2007-0055072A | US2009-0054493A | US2011-0038799A | US2011-0124607A | US2011-0152379A | US2011-0150899A | US2011-0230826A

Pharmaceutical Composition

Appl. No. (Date)	**PCT / KR2011 / 002953** (2011-04-22)
Pub. No.	-
Title of the invention	Regulator for chemokine expression
Inventors	CHUNG, Doo-Hyun | KIM, Hye-Sung | KIM, Hye-Young
Gist of the invention	The present invention relates to a composition and method for suppressing the expression of chemokines using Fas ligand. The method can be used for controlling inflammatory responses.
Figure	
Claim 1	A composition for suppressing the expression of at least one of chemokine 5 selected from the group consisting of Mip-1α, RANTES, and IP-10 comprising a soluble FAS (sFas) ligand inhibitor as an active ingredient.
Related US patents	US8158170B | US7982050B | US7960345B | US7902165B | US7897722B | US7528276B | US7067508B | US6180599B | US6566399B | US2012-0088731A | US2012-0083472A | US2012-0029177A | US2011-0274707A | US2011-0250193A | US2011-0218240A | US2011-0152524A | US2011-0123538A | US2011-0105622A | US2011-0028741A | US2010-0267684A | US2010-0105763A | US2010-0104590A | US2010-0041723A | US2009-0326015A | US2007-0055072A | US2009-0054493A | US2011-0038799A | US2011-0124607A | US2011-0152379A | US2011-0150899A | US2011-0230826A

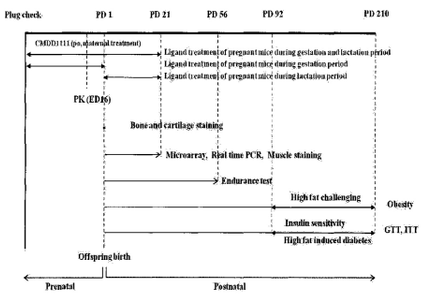
Pharmaceutical Composition

Appl. No. (Date)	**PCT / KR2011 / 004770** (2011-06-29)
Pub. No.	-
Title of the invention	Antifungal composition having antifungal activity specifically against fungus belonging to Genus Ganoderma comprising cis-cyclo (L-Phe-L-Pro) as an active ingredient
Inventors	KANG, Sa-ouk | KWAK, Min-Kyu | LIU, Rui | KWON, Jun-Oh | OH, Eun-Seon
Gist of the invention	The present invention relates to antifungal composition showing excellent anti-fungal activity specifically to fungus of Genus Ganoderma.
Figure	
Claim 1	An antifungal composition having a antifungal activity specifically against fungus belonging to Genus Ganoderma comprising cis-cyclo (L-Phe-L-Pro) as an active ingredient.
Related US patents	US8158170B | US7982050B | US7960345B | US7902165B | US7897722B | US7528276B | US7067508B | US6180599B | US6566399B | US2012-0088731A | US2012-0083472A | US2012-0029177A | US2011-0274707A | US2011-0250193A | US2011-0218240A | US2011-0152524A | US2011-0123538A | US2011-0105622A | US2011-0028741A | US2010-0267684A | US2010-0105763A | US2010-0104590A | US2010-0041723A | US2009-0326015A | US2007-0055072A | US2009-0054493A | US2011-0038799A | US2011-0124607A | US2011-0152379A | US2011-0150899A | US2011-0230826A

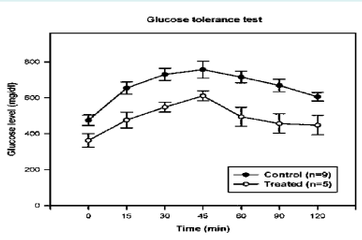
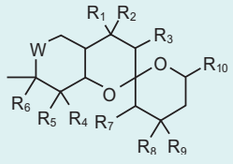
Pharmaceutical Composition

Appl. No. (Date)	**PCT / KR2011 / 005212** (2011-07-15)
Pub. No.	WO2012 / 008788
Title of the invention	Composition containing serine as an active ingredient for the prevention and treatment of fatty liver diseases, and use thereof
Inventors	LEE, Byung-Hoon | YIN, Hu-Quan
Gist of the invention	The present invention relates to a composition for the prevention and treatment of fatty liver diseases, comprising serine as an active ingredient.
Figure	No Image
Claim 1	A pharmaceutical composition for the prevention and treatment of fatty liver diseases comprising serine as an active ingredient.
Related US patents	US8158170B | US7982050B | US7960345B | US7902165B | US7897722B | US7528276B | US7067508B | US6180599B | US6566399B | US2012-0088731A | US2012-0083472A | US2012-0029177A | US2011-0274707A | US2011-0250193A | US2011-0218240A | US2011-0152524A | US2011-0123538A | US2011-0105622A | US2011-0028741A | US2010-0267684A | US2010-0105763A | US2010-0104590A | US2010-0041723A | US2009-0326015A | US2007-0055072A | US2009-0054493A | US2011-0038799A | US2011-0124607A | US2011-0152379A | US2011-0150899A | US2011-0230826A

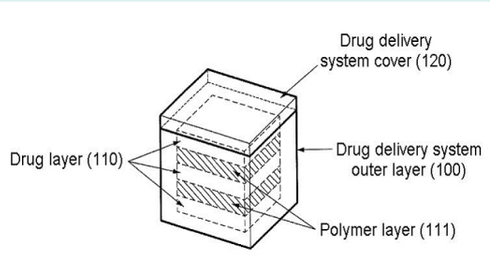
Pharmaceutical Composition

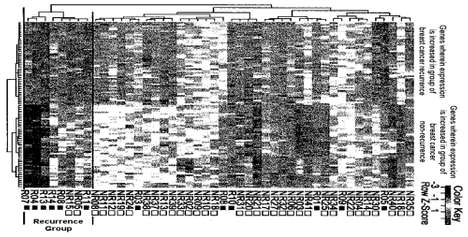
Appl. No. (Date)	**PCT / KR2011 / 006467** (2011-08-31)
Pub. No.	WO2012 / 030165
Title of the invention	Use of the fetal reprogramming of a PPAR δ agonist
Inventors	KANG, Heonjoong | HWANG, Hoo-Sang | CHIN, Jungwook
Gist of the invention	The PPAR δ agonist can be used in a pharmaceutical composition for enhancing the endurance of a human and an animal by embryonic/fetal reprogramming, preventing/inhibiting metabolic diseases such as obesity, diabetes, arteriosclerosis and fatty liver, and enhancing memory.
Figure	
Claim 1	A composition for mammalian fetal reprogramming comprising a peroxisome proliferator activated receptor δ (PPAR δ) agonist as an active ingredient.
Related US patents	US8158170B | US7982050B | US7960345B | US7902165B | US7897722B | US7528276B | US7067508B | US6180599B | US6566399B | US2012-0088731A | US2012-0083472A | US2012-0029177A | US2011-0274707A | US2011-0250193A | US2011-0218240A | US2011-0152524A | US2011-0123538A | US2011-0105622A | US2011-0028741A | US2010-0267684A | US2010-0105763A | US2010-0104590A | US2010-0041723A | US2009-0326015A | US2007-0055072A | US2009-0054493A | US2011-0038799A | US2011-0124607A | US2011-0152379A | US2011-0150899A | US2011-0230826A

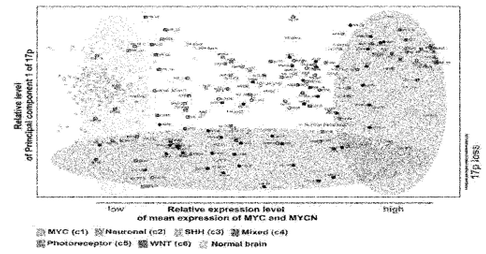
Pharmaceutical Composition

Appl. No. (Date)	**PCT / KR2011 / 006638** (2011-09-07)
Pub. No.	WO2012 / 033353
Title of the invention	Sesterterpene compounds and use thereof
Inventors	KANG, Heonjoong | WON, Dong Hwan | YANG, Inho | KIM, Eun Oh | KIM, Jung Ah | GIRI, Awadut Gajendra | MALLEPALLY, Venkat Reddy
Gist of the invention	Sesterterpene compounds, to the precursors thereof that are hydrolysable in a living body, or to the pharmaceutically acceptable salts thereof, and also relates to the prevention and treatment efficacy of the sesterterpene compounds with respect to non-insulin dependent diabetes mellitus, diabetic complications, alcoholic, non-alcoholic, and viral fatty liver diseases, obesity, hyperlipidemia, atherosclerosis, cardiovascular diseases, and cerebropathies.
Figure	
Claim 1	A sesterterpene compound represented by the following Formula I.  [Formula I]
Related US patents	US8158170B | US7982050B | US7960345B | US7902165B | US7897722B | US7528276B | US7067508B | US6180599B | US6566399B | US2012-0088731A | US2012-0083472A | US2012-0029177A | US2011-0274707A | US2011-0250193A | US2011-0218240A | US2011-0152524A | US2011-0123538A | US2011-0105622A | US2011-0028741A | US2010-0267684A | US2010-0105763A | US2010-0104590A | US2010-0041723A | US2009-0326015A | US2007-0055072A | US2009-0054493A | US2011-0038799A | US2011-0124607A | US2011-0152379A | US2011-0150899A | US2011-0230826A

Pharmaceutical Composition

Appl. No. (Date)	**PCT / KR2011 / 006945** (2011-09-20)
Pub. No.	-
Title of the invention	Drug delivery system comprising layered-structure
Inventors	CHO, Dong Il | HONG, Seok Jun | LEE, Sang Min | AHN, Jae Hyun | YOO, Hyoung Jung
Gist of the invention	The present invention relates to a drug delivery system to control the rate and amount of the released drug in a body comprising the layered-structure wherein drug layers and bio-degradable polymer layers are alternately layered.
Figure	
Claim 1	A drug delivery system comprising the layered-structure wherein drug layers and bio-degradable polymer layers regulating release of the drug are alternately layered.
Related US patents	US8158170B | US7982050B | US7960345B | US7902165B | US7897722B | US7528276B | US7067508B | US6180599B | US6566399B | US2012-0088731A | US2012-0083472A | US2012-0029177A | US2011-0274707A | US2011-0250193A | US2011-0218240A | US2011-0152524A | US2011-0123538A | US2011-0105622A | US2011-0028741A | US2010-0267684A | US2010-0105763A | US2010-0104590A | US2010-0041723A | US2009-0326015A | US2007-0055072A | US2009-0054493A | US2011-0038799A | US2011-0124607A | US2011-0152379A | US2011-0150899A | US2011-0230826A

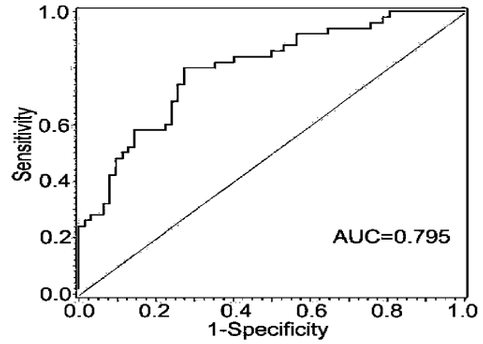
Appl. No. (Date)	**PCT / KR2011 / 002193** (2011-03-30) Core
Pub. No.	WO2011 / 122857
Title of the invention	Composition for predicting prognosis of breast cancer, and kit containing same
Inventors	PARK, Woong Yang | PARK, Ae Kyung | NOH, Dong Young | HAN, Won Shik
Gist of the invention	A composition for predicting the prognosis of breast cancer, containing a medicine for measuring the expression level of a marker gene for predicting the prognosis of breast cancer, a kit containing the composition for predicting the prognosis of breast cancer, and a method for providing the information necessary for predicting prognosis including the chance of breast cancer recurrence by using the marker for predicting the prognosis of breast cancer.
Figure	
Claim 1	A composition for predicting the prognosis of breast cancer, comprising an agent for measuring the expression levels of mRNAs of at least 5 genes selected from the group consisting of the genes having the nucleotide sequences represented by SEQ. ID. NOs: 1 – 50, and at least 5 genes selected from the other genes having the nucleotide sequences represented by SEQ. ID. NOs: 51 – 100, or the proteins coded by the genes.
Related US patents	US8084399B | US7999070B | US7947435B | US7482134B | US7232661B | US2012-0015383A | US2011-0311984A | US2011-0294130A | US2011-0286920A | US2011-0250701A | US2011-0250136A | US2011-0059477A | US2011-0059022A | US2010-0179307A | US2010-0174171A | US2010-0105149A | US2010-0267031A | US2012-0028834A

Appl. No. (Date)	**PCT / KR2011 / 002195** (2011-03-30) Core
Pub. No.	WO2011 / 122859
Title of the invention	Composition for predicting chance of brain tumor recurrence and survival prognosis, and kit containing same
Inventors	PARK, Woong Yang | PARK, Ae Kyung | KIM, Seung Ki
Gist of the invention	The present invention relates to a composition for predicting chance of brain tumor recurrence and survival prognosis, and can be effectively used to increase the survival rate of patients with brain tumor recurrence.
Figure	
Claim 1	A composition for predicting chance of brain tumor recurrence and survival prognosis comprising an agent for measuring the expressions of mRNAs of at least 5 genes selected from the group consisting of the genes on chromosome 17p having the nucleotide sequences represented by SEQ. ID. NOs: 1 – NO: 92; one or more genes selected among MYC and MYCN genes having the nucleotide sequences represented by SEQ. ID. NO: 93 –NO: 94; and at least two genes selected from the group consisting of WNT related genes having the nucleotide sequences represented by SEQ. ID. NOs: 95 –NO: 106, or the proteins coded by the genes.
Related US patents	US8084399B | US7999070B | US7947435B | US7482134B | US7232661B | US2012-0015383A | US2011-0311984A | US2011-0294130A | US2011-0286920A | US2011-0250701A | US2011-0250136A | US2011-0059477A | US2011-0059022A | US2010-0179307A | US2010-0174171A | US2010-0105149A | US2010-0267031A | US2012-0028834A

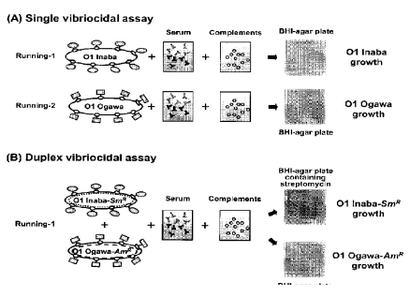
Diagnosis / Analysis

Appl. No. (Date)	**PCT / KR2011 / 008313** (2011-11-02) Core
Pub. No.	WO2012 / 060635
Title of the invention	Polynucleotide for diagnosing sensitivity to stomach cancer
Inventors	PARK, Sue Kyung
Gist of the invention	Apolynucleotide including a gene which is related to the metabolism of isoflavone, and especially a single-nucleotide polymorphism (SNP) that is induced from a gene which is on the signaling path of NF-κB, ERK, and AKT, or a reciprocal polynucleotide thereof as an indicative factor for diagnosing sensitivity to stomach cancer.
Figure	No Image
Claim 1	A polynucleotide or a complementary polynucleotide thereof for diagnosing sensitivity to stomach cancer comprising at least one polynucleotide sequence selected from the group consisting of the sequences represented by SEQ. ID. NOs: 1 – NO: 13, wherein the polynucleotide comprises 10 – 50 serial DNA sequences including the 27th base (polymorphic area).
Related US patents	US8084399B | US7999070B | US7947435B | US7482134B | US7232661B | US2012-0015383A | US2011-0311984A | US2011-0294130A | US2011-0286920A | US2011-0250701A | US2011-0250136A | US2011-0059477A | US2011-0059022A | US2010-0179307A | US2010-0174171A | US2010-0105149A | US2010-0267031A | US2012-0028834A

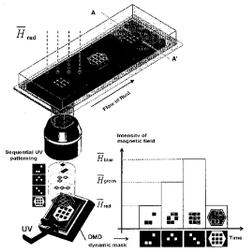
Diagnosis / Analysis

Appl. No. (Date)	**PCT / KR2011 / 008314** (2011-11-02) Core
Pub. No.	WO2012 / 060636
Title of the invention	Method for diagnosing stomach cancer
Inventors	PARK, Sue Kyung
Gist of the invention	The present invention relates to a simple and effective method for diagnosing stomach cancer by measuring the level of soluble truncated c-Met protein in a biological sample.
Figure	
Claim 1	A method for diagnosing stomach cancer, comprising the following steps: measuring the level of soluble truncated c-Met protein in a biological sample; and comparing the protein level with that of a normal individual.
Related US patents	US8084399B | US7999070B | US7947435B | US7482134B | US7232661B | US2012-0015383A | US2011-0311984A | US2011-0294130A | US2011-0286920A | US2011-0250701A | US2011-0250136A | US2011-0059477A | US2011-0059022A | US2010-0179307A | US2010-0174171A | US2010-0105149A | US2010-0267031A | US2012-0028834A

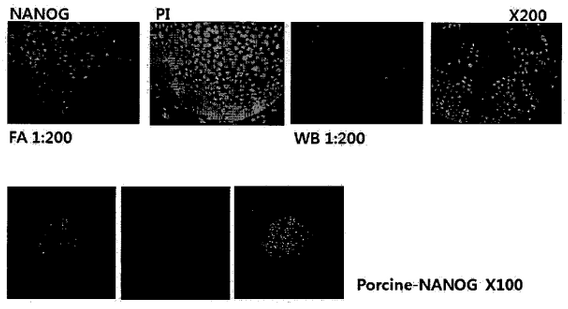
Diagnosis / Analysis

Appl. No. (Date)	**PCT / KR2009 / 007035** (2009-11-27)
Pub. No.	WO2011 / 059130
Title of the invention	Duplex vibriocidal assay for simultaneously measuring vibriocidal serum antibody valence of combined vibrio vaccine
Inventors	HAN, Seung Hyun | YUN, Cheol Heui
Gist of the invention	The present invention relates to a duplex vibriocidal assay capable of simultaneously measuring vibriocidal serum antibody titer with respect to each serotype when a combined Vibrio vaccine prepared by mixing two or more kinds of strains is evaluated after the combined vaccine is administrated.
Figure	
Claim 1	A duplex vibriocidal assay capable of simultaneously measuring vibriocidal serum antibody titer with respect to each serotype of a combined Vibrio vaccine consisting of the steps of inoculating a combined Vibrio vaccine to human or animals and obtaining serum from the vaccines; inactivating complements of the serum and diluting thereof; preparing each Vibrio strain of the combined Vibrio vaccine; preparing a mixture of the serum, each Vibrio strain and complement; culturing the mixture after inoculating thereof onto a medium; and measuring vibriocidal serum antibody titer by reverse-counting serum dilution that can inhibit cell growth by 50% in the culture.
Related US patents	US8084399B | US7999070B | US7947435B | US7482134B | US7232661B | US2012-0015383A | US2011-0311984A | US2011-0294130A | US2011-0286920A | US2011-0250701A | US2011-0250136A | US2011-0059477A | US2011-0059022A | US2010-0179307A | US2010-0174171A | US2010-0105149A | US2010-0267031A | US2012-0028834A

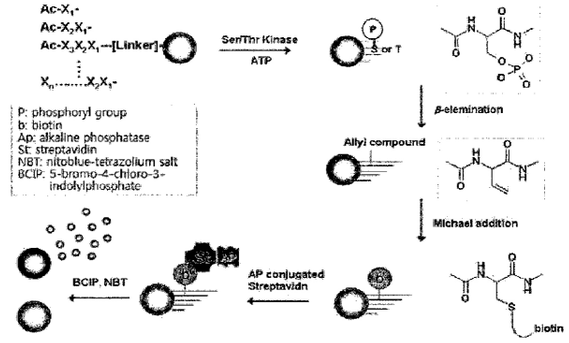
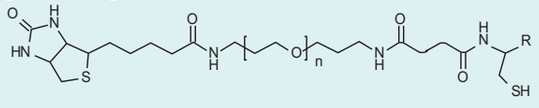
Diagnosis / Analysis

Appl. No. (Date)	**PCT / KR2010 / 002249** (2010-04-13)
Pub. No.	WO2010 / 120080
Title of the invention	Color-coded magnetic structure
Inventors	KWON, Sunghoon | LEE, Howon | KIM, Junhoi | KIM, Hyoki
Gist of the invention	A color-coding method comprising the steps of: providing a composition containing a liquid medium, and magnetic nanoparticles distributed in the liquid medium; applying a magnetic field to the composition to align the magnetic nanoparticles; and radiating a patterned energy source to solidify the composition, wherein the intensity of the magnetic field varies to sequentially solidify various components of the composition and to fix a plurality of color codes.
Figure	
Claim 1	A color-coding method comprising the following steps: Providing a composition comprising a liquid medium, and magnetic nanoparticles distributed in the liquid medium; Applying a magnetic field to the composition to align the magnetic nanoparticles; and Radiating a patterned energy source to solidify the composition, wherein the intensity of the magnetic field varies to sequentially solidify various components of the composition and to fix a plurality of color codes.
Related US patents	US8084399B | US7999070B | US7947435B | US7482134B | US7232661B | US2012-0015383A | US2011-0311984A | US2011-0294130A | US2011-0286920A | US2011-0250701A | US2011-0250136A | US2011-0059477A | US2011-0059022A | US2010-0179307A | US2010-0174171A | US2010-0105149A | US2010-0267031A | US2012-0028834A

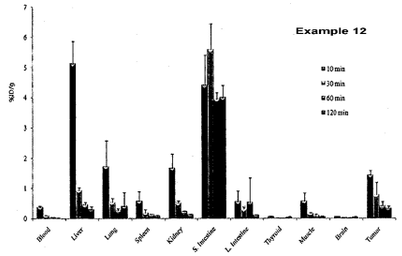
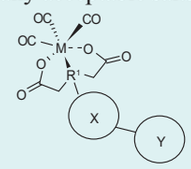
Diagnosis / Analysis

Appl. No. (Date)	**PCT / KR2010 / 008711** (2010-12-07)
Pub. No.	WO2011 / 071297
Title of the invention	Composition for analyzing the pluripotency of pig stem cells
Inventors	LEE, Chang-Kyu | KIM, Hye Sun | SON, Hye Young | PARK, Jin Kyu | KIM, Hyeong Min | UK, Kyung Jun | HWANG, Jae Yeon
Gist of the invention	The present invention relates to a composition for analyzing the pluripotency of pig stem cells comprising an agent for measuring the expression level of pig NANOG protein.
Figure	
Claim 1	A composition for analyzing the pluripotency of pig stem cells comprising an agent for measuring the expression level of pig NANOG protein.
Related US patents	US8084399B | US7999070B | US7947435B | US7482134B | US7232661B | US2012-0015383A | US2011-0311984A | US2011-0294130A | US2011-0286920A | US2011-0250701A | US2011-0250136A | US2011-0059477A | US2011-0059022A | US2010-0179307A | US2010-0174171A | US2010-0105149A | US2010-0267031A | US2012-0028834A

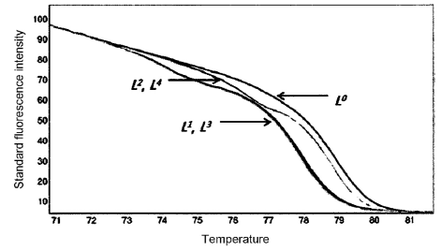
Diagnosis / Analysis

Appl. No. (Date)	**PCT / KR2011 / 001855** (2011-03-17)
Pub. No.	WO2011 / 115435
Title of the invention	Thiol derivative of biotin, and analysis method of substrate specificity of serine/threonine kinase using same
Inventors	LEE, Yoon-Sik | KIM, Mira | P ARK, Yong-Sun | SHIN, Dong-Sik
Gist of the invention	The present invention relates to a thiol derivative of biotin, and an analysis method of the substrate specificity of a serine/threonine kinase using the same.
Figure	
Claim 1	A compound represented by the following Formula I. [Formula I] 
Related US patents	US8084399B | US7999070B | US7947435B | US7482134B | US7232661B | US2012-0015383A | US2011-0311984A | US2011-0294130A | US2011-0286920A | US2011-0250701A | US2011-0250136A | US2011-0059477A | US2011-0059022A | US2010-0179307A | US2010-0174171A | US2010-0105149A | US2010-0267031A | US2012-0028834A

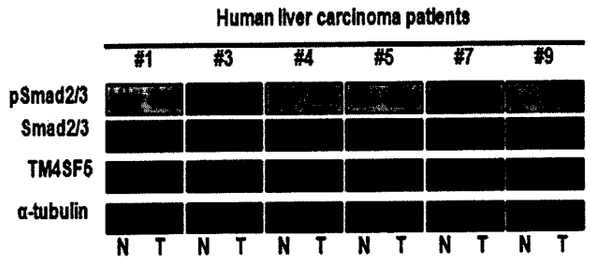
Diagnosis / Analysis

Appl. No. (Date)	**PCT / KR2011 / 003801** (2011-05-24)
Pub. No.	WO2011 / 149250
Title of the invention	Tricarbonyl Technetium-99m or Rhenium-188 labeled ring RGD derivative, a preparation method thereof, and a pharmaceutical composition containing the derivative as an active ingredient for use in the diagnosis or treatment of angiogenesis-related diseases
Inventors	LEE, Byung Chul | KIM, Sang Eun | KIM, Ji Sun | MOON, Byung Seok | JUNG, Jae Ho
Gist of the invention	The tricarbonyl technetium-99m or rhenium-188 labeled ring RGD derivative has a high subnanomolar affinity to αvβ3 integrin, and is useful as a medicine for the diagnosis or treatment of angiogenesis-related diseases.
Figure	
Claim 1	A tricarbonyl technetium-99m or rhenium-188 labeled ring RGD derivative represented by the following Formula 1 or pharmaceutically acceptable salts thereof.  [Formula 1]
Related US patents	US8084399B | US7999070B | US7947435B | US7482134B | US7232661B | US2012-0015383A | US2011-0311984A | US2011-0294130A | US2011-0286920A | US2011-0250701A | US2011-0250136A | US2011-0059477A | US2011-0059022A | US2010-0179307A | US2010-0174171A | US2010-0105149A | US2010-0267031A | US2012-0028834A

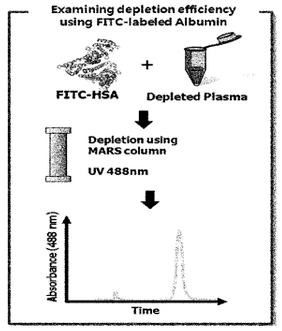
Diagnosis / Analysis

Appl. No. (Date)	**PCT / KR2011 / 003833** (2011-05-25)
Pub. No.	WO2011 / 149267
Title of the invention	Primer set for selecting PMMoV-resistant pepper varieties, method thereof, and kit thereof
Inventors	KANG, Byoung Cheorl | YANG, Hee Bum
Gist of the invention	The present invention relates to an oligonucleotide primer set for selecting PMMoV-resistant pepper varieties, a method thereof, and a kit thereof.
Figure	
Claim 1	An oligonucleotide primer set for selecting Pepper mild mottle virus (PMMoV)-resistant pepper varieties, comprising one or more oligonucleotide primer sets selected from the group consisting of an oligonucleotide primer set represented by SEQ. ID. NO: 1 and NO: 2, an oligonucleotide primer set represented by SEQ. ID. NO: 7 and NO: 8, and an oligonucleotide primer set represented by SEQ. ID. NO: 7 and NO: 9.
Related US patents	US8084399B | US7999070B | US7947435B | US7482134B | US7232661B | US2012-0015383A | US2011-0311984A | US2011-0294130A | US2011-0286920A | US2011-0250701A | US2011-0250136A | US2011-0059477A | US2011-0059022A | US2010-0179307A | US2010-0174171A | US2010-0105149A | US2010-0267031A | US2012-0028834A

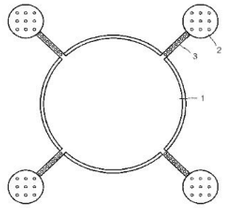
Diagnosis / Analysis

Appl. No. (Date)	**PCT / KR2011 / 005444** (2011-07-22)
Pub. No.	WO2012 / 015200
Title of the invention	Composition for diagnosing, treating, and preventing liver disease
Inventors	LEE, Jung Weon | PARK, Ki Hun | KANG, Min Kyung
Gist of the invention	Liver disease diagnosis and substance screening through the measurement of TM4SF5 expression level, and liver disease prevention and/or treatment through the use of an antagonist for TM4SF5.
Figure	
Claim 1	A composition for diagnosing liver disease comprising a material for measuring the level of TM4SF5 (Transmembrane 4 L six family member 5 or Four-transmembrane L6 Superfamily member 5) protein.
Related US patents	US8084399B | US7999070B | US7947435B | US7482134B | US7232661B | US2012-0015383A | US2011-0311984A | US2011-0294130A | US2011-0286920A | US2011-0250701A | US2011-0250136A | US2011-0059477A | US2011-0059022A | US2010-0179307A | US2010-0174171A | US2010-0105149A | US2010-0267031A | US2012-0028834A

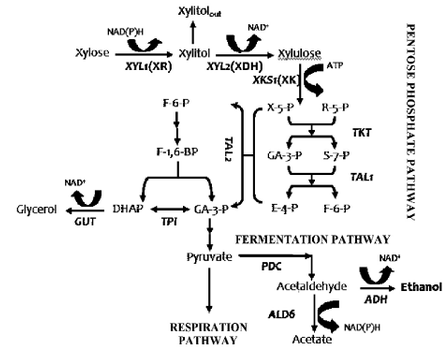
Diagnosis / Analysis

Appl. No. (Date)	**PCT / KR2011 / 005500** (2011-07-26)
Pub. No.	WO2012 / 015219
Title of the invention	Real-time monitoring of depletion of high-abundance blood proteins or recovery of low-abundance blood proteins by UV spectrometry
Inventors	KIM, Young Soo | KIM, Kyung Gon | YU, Ji Young
Gist of the invention	Disclosed is a method for monitoring depletion of high-abundance and/or recovery of low-abundance proteins from blood in real time.
Figure	
Claim 1	A method for monitoring depletion yield of high-abundance proteins and/or recovery yield of low-abundance proteins from blood in real time, comprising: (a) labeling high-abundance and/or low-abundance proteins of a blood specimen with a fluorescent or UV marker; and (b) passing blood samples containing the fluorescent or UV marker-labeled high-abundance and/or low-abundance proteins through a removal column.
Related US patents	US8084399B | US7999070B | US7947435B | US7482134B | US7232661B | US2012-0015383A | US2011-0311984A | US2011-0294130A | US2011-0286920A | US2011-0250701A | US2011-0250136A | US2011-0059477A | US2011-0059022A | US2010-0179307A | US2010-0174171A | US2010-0105149A | US2010-0267031A | US2012-0028834A

Diagnosis / Analysis

Appl. No. (Date)	**PCT / KR2012 / 000655** (2012-01-30)
Pub. No.	-
Title of the invention	Sensor for detecting target gene and method for virus-screening and analysis of mutation site
Inventors	LEE, Jeong Hoon | CHA, Mi Sun | OH, Heung Beom | PARK, Joo Seong | CHOI, Jun Gyu | PARK, Jin Hyeok
Gist of the invention	The present invention relates to a sensor for detecting a target virus and a genotype of the same, and for analysis of mutation site of the target virus at the same time.
Figure	
Claim 1	A sensor for detecting a target gene that facilitates the detection of a target gene and analysis of mutation of the target gene at the same time comprising a thin membrane transducer to which at least two polynucleotide is attached, wherein the polynucleotide is selected from the group consisting of the first polynucleotide comprising the nucleotide sequence complementary to that of the target gene and 14 mer – 40 mer in length including the nucleotide that does not bind complementarily to the nucleotide of the location of the target gene where SNP is expected at 5'-end; the second polynucleotide comprising the nucleotide sequence complementary to that of the target gene and 14 mer - 40 mer in length containing the nucleotide that does not bind complementarily to the nucleotide of the location where SNP is expected in the target gene at 3'-end; and the third polynucleotide comprising the nucleotide sequence complementary to that of the target gene and 14 mer – 40 mer in length containing the nucleotide which is expected to be on the location where SNP is expected between 5'-end and 3'-end.
Related US patents	US8084399B | US7999070B | US7947435B | US7482134B | US7232661B | US2012-0015383A | US2011-0311984A | US2011-0294130A | US2011-0286920A | US2011-0250701A | US2011-0250136A | US2011-0059477A | US2011-0059022A | US2010-0179307A | US2010-0174171A | US2010-0105149A | US2010-0267031A | US2012-0028834A

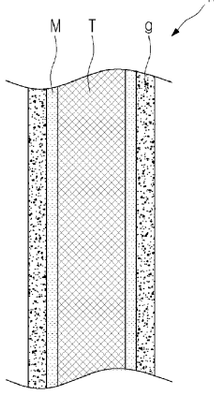
Etc.

Appl. No. (Date)	**PCT / KR2009 / 007458** (2009-12-12)
Pub. No.	WO2011 / 071204
Title of the invention	Method for producing ethanol from xylose using recombinant saccharomyces cerevisiae involving coupled use of NADH and NAD^+
Inventors	SEO, Jin-Ho | PARK, Yong-Cheol
Gist of the invention	Disclosed is a method for producing ethanol at a high yield and high production efficiency from xylose using recombinant Saccharomyces cerevisiae.
Figure	
Claim 1	A method for producing ethanol from xylose by using a recombinant Saccharamyces cerevisiae wherein the recombinant Saccharamyces cerevisiae is transformed to express xylose reductase (XR) converting xylose into xylitol using NADH as a cofactor; transformed to express xylitol dehydrogenase (XDH) converting xylose into xylulose using NAD^+ as a cofactor; transformed to express xylulokinase (XK) converting xylulose into xylulose 5-phospate; and transformed to over-express transaldolase 1 (TAL1) converting sedoheptulose 7-phosphate and glyceraldehyde 3-phosphate into erythrose 4-phosphate and fructose-6-phosphate.
Related US patents	US2011-0143409A

Etc.

Appl. No. (Date)	**PCT / KR2010 / 000393** (2010-01-21)
Pub. No.	WO2011 / 090224
Title of the invention	Method for coating a medical product with a pharmaceutical substance
Inventors	PARK, Jong-Sang | KIM, Dae-Joong | BAEK, In-Su | BAI, Chengzhe
Gist of the invention	The present invention relates to a method for coating a medical product with a sticky gel-type pharmaceutical substance, which can be easily applied on a silk or polypropylene product.

Figure

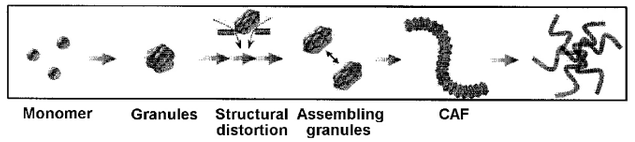


Claim 1	A method for coating a medical product with a pharmaceutical substance, comprising the following steps: Coating a surface of a medical product with a pharmaceutical substance; and Coating the surface of the medical product with a sticky semi-solid gel-type pharmaceutical substance.
Related US patents	US2011-0183064A

Etc.

Appl. No. (Date)	**PCT / KR2010 / 003025** (2010-05-13)
Pub. No.	WO2011 / 126174
Title of the invention	Preparation method of curly amyloid fibrils derived from alpha-synuclein, preparation method of hydrogel using same, and using method thereof
Inventors	PAIK, Seung Ryeoul | BHAK, Ghibom
Gist of the invention	A preparation method of amyloid fibrils derived from alpha-synuclein, and a method using the same.

Figure

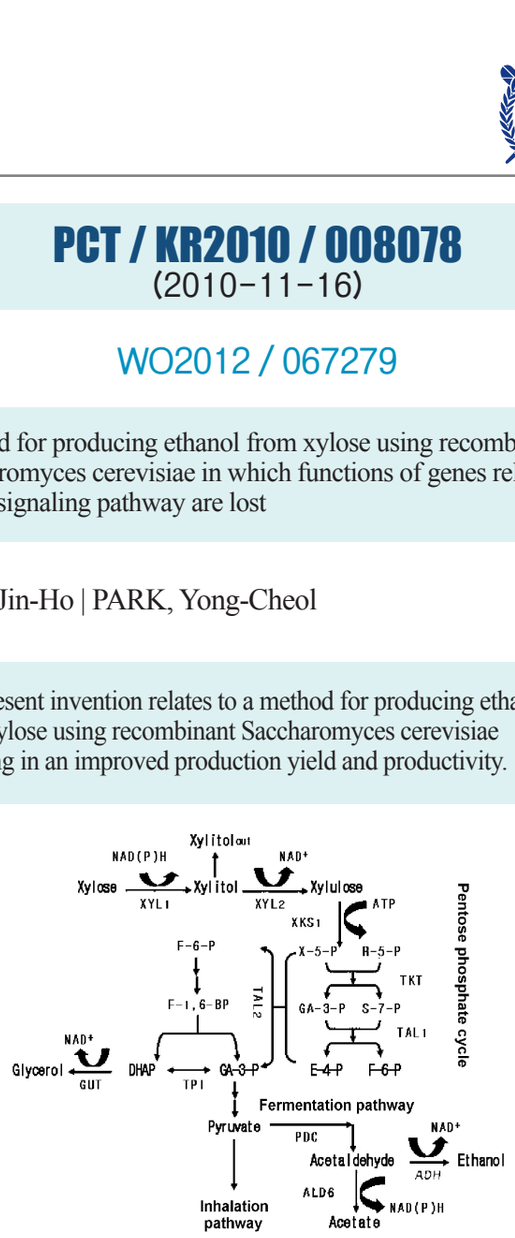


Claim 1	A preparation method of curly amyloid fibrils derived from alpha-synuclein comprising the following steps: preparing alpha-synuclein granules by incubating alpha-synuclein; and assembling a plurality of the alpha-synuclein granules to prepare curly amyloid fibrils.
Related US patents	US7230164B | US6579518B | US2011-0201064A | US2010-0137149A

Etc.

Appl. No. (Date)	**PCT / KR2010 / 008078** (2010-11-16)
Pub. No.	WO2012 / 067279
Title of the invention	Method for producing ethanol from xylose using recombinant saccharomyces cerevisiae in which functions of genes related to Tor signaling pathway are lost
Inventors	SEO, Jin-Ho | PARK, Yong-Cheol
Gist of the invention	The present invention relates to a method for producing ethanol from xylose using recombinant Saccharomyces cerevisiae resulting in an improved production yield and productivity.

Figure

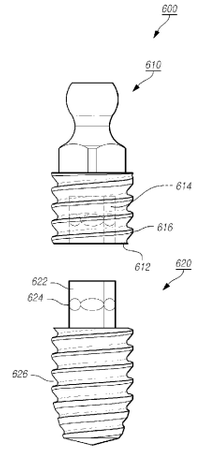


Claim 1	A method for producing ethanol from xylose using recombinant Saccharomyces cerevisiae which is transformed to express xylose reductase (XR) and to over-express xylitol dehydrogenase (XDH), wherein the recombinant Saccharomyces cerevisiae loses the functions of genes related to a Tor signaling pathway by partial or entire deletion of the genes.
Related US patents	US2011-0143409A

Etc.

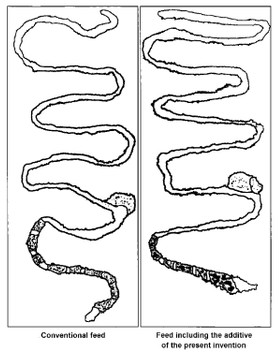
Appl. No. (Date)	**PCT / KR2010 / 008690** (2010-12-07)
Pub. No.	WO2011 / 071289
Title of the invention	Absorbable material, and implant fixture and implant using same
Inventors	KIM, Jung Wook | LEE, Seung Pyo | KIM, Tae Il | LEE, Hae Hyoung | YI, Won Jin | KIM, Hae Won
Gist of the invention	The present invention relates to a nano-hybrid material, an implant fixture and an absorbable implant including same wherein an inorganic nanoparticle substance is dispersed in an organic substance and bonded to the organic substance.

Figure

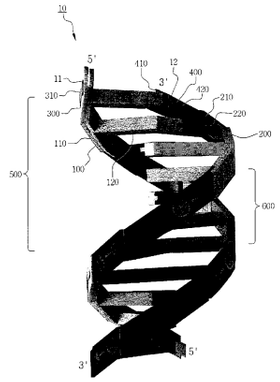


Claim 1	An absorbable medical nano-hybrid wherein an inorganic nanoparticle substance is dispersed in an organic substance and the inorganic nanoparticle substance is bonded to the organic substance.
Related US patents	US7897163B | US2009-0304807A

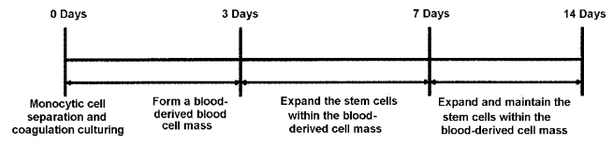
Etc.

Appl. No. (Date)	**PCT / KR2011 / 004618** (2011-06-24)
Pub. No.	WO2012 / 011675
Title of the invention	Feed additive including a specially fermented silicate mineral for replacing antibiotics and for regulating the immune function and promoting growth in animals, and method for producing same
Inventors	LEE, Jong Doo | WOO, Hee Jong
Gist of the invention	The present invention provides a method for producing a purified silicate mineral as a feed additive that emanates quantum energy, and an animal feed including the same.
Figure	
Claim 1	A method for producing a feed additive comprising a purified silicate mineral, comprising the following steps: (a) obtaining a raw silicate mineral; (b) pulverizing the raw silicate mineral obtained in step (a) into the size of 320 mesh or less in diameter; (c) removing heavy metals and harmful materials from the pulverized material obtained in step (b); (d) sterilizing and drying the resultant of step (c); (e) removing impurities from the resultant of step (d); and (f) maturing the resultant of step (e) after adding distilled water thereto.
Related US patents	US7230164B | US6579518B | US2011-0201064A | US2010-0137149A

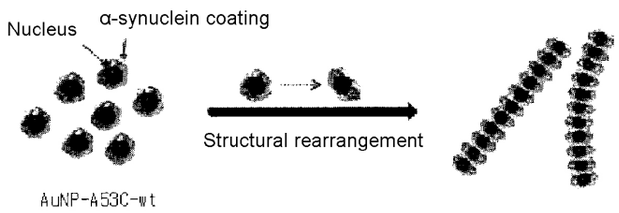
Etc.

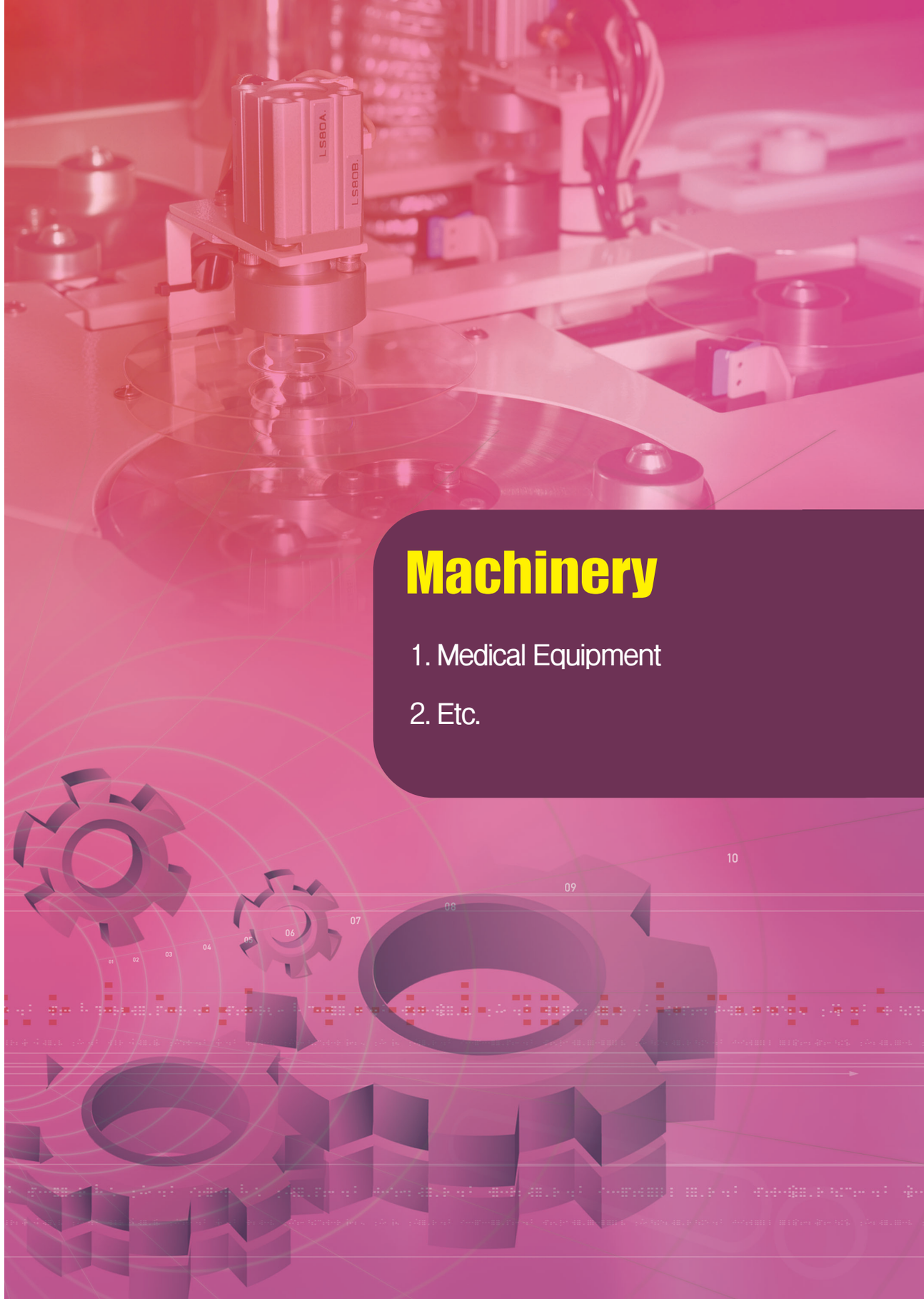
Appl. No. (Date)	**PCT / KR2011 / 005146** (2011-07-13)
Pub. No.	WO2012 / 008746
Title of the invention	DNA double helical structure model
Inventors	PARK, Se Hui | KIM, Young Soo
Gist of the invention	A DNA double helical structure model of the present invention comprises a plurality of nucleotide members capable of being coupled to or being separated from each other.
Figure	
Claim 1	A DNA double helical structure model consisting of a plurality of nucleotide member capable of being coupled to or being separated from each other, wherein the nucleotide member comprises chain units extended at uniform lengths; and base units extended from the inner lateral side of the chain units, the chain unit of the nucleotide member can be coupled to the chain unit of another nucleotide member, the base unit of the nucleotide member can be coupled to the base unit of another nucleotide member, and the coupling portion of two nucleotide members in which the chain units are coupled to each other can be bent toward the inner lateral side of the chain units.
Related US patents	US8138005B | US2010-0267143A

Etc.

Appl. No. (Date)	**PCT / KR2011 / 005762** (2011-08-08)
Pub. No.	WO2012 / 026687
Title of the invention	Human blood-derived blood cell mass assay using cell coagulation, blood adult stem cells using same, method for expanding progenitor cells, and stem cells produced using the method
Inventors	PARK, Young-Bae | KIM, Hyo-Soo | KANG, Hyun-Jae | CHO, Hyun-Jai | HUR, Jin | PARK, Jong-Han | JANG, Jae-Hee
Gist of the invention	The present invention relates to a method for expanding adult stem cells and progenitor cells in blood by inducing human blood-derived blood cell mass using cell coagulation, which is a technique of using monocytic blood cells to effectively culture and proliferate adult stem cells and progenitor cells.
Figure	
Claim 1	A method for expanding adult stem cells and progenitor cells in blood by inducing human blood-derived blood cell mass using cell coagulation comprising the following steps: (1) isolating mononuclear cells from blood; (2) culturing the isolated cells by using 3-dimensional coagulation; (3) growing the 3-dimensionally cultured cells by long-term culture; and (4) preparing single cells by dissociating the cell mass.
Related US patents	US8003093B | US6590139B | US2012-0021509A | US2012-0003186A | US2011-0223660A | US2011-0223140A | US2011-0183404A | US2011-0053263A | US2010-0293626A | US2010-0285582A | US2010-0285579A | US2010-0021436A | US2009-0305413A | US2009-0285851A | US2011-0142809A | US2011-0256626A | US2008-0317769A | US2010-0227396A

Etc.

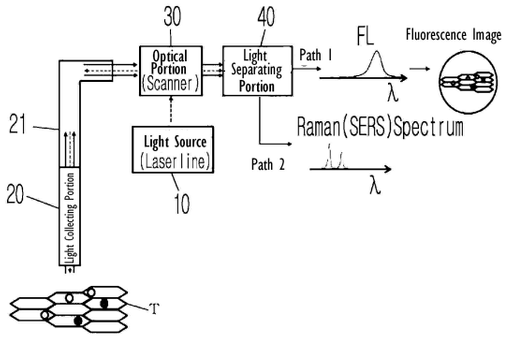
Appl. No. (Date)	**PCT / KR2011 / 007119** (2011-09-28)
Pub. No.	WO2012 / 044048
Title of the invention	Conductive bio-nano fusion chain and method for preparing same
Inventors	PAIK, Seung-Ryeoul | LEE, Dae-Kyun
Gist of the invention	A multifunctional photoconductive bio-nano fusion chain, which is formed by linearly arranging a conductive nanoparticle chain in a non-conductrive alpha-synuclein amyloid fibrilsand a method for preparing same.
Figure	
Claim 1	A conductive bio-nano chain in which a conductive nanoparticle chain is linearly arranged in non-conductive α–synuclein amyloid fibrils.
Related US patents	US7230164B | US6579518B | US2011-0201064A | US2010-0137149A



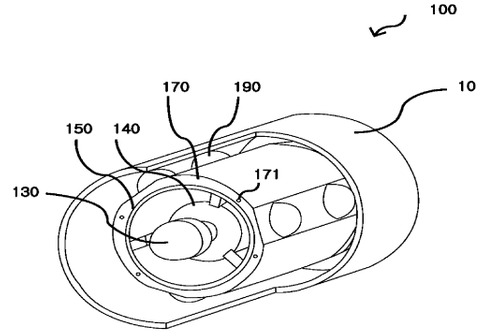
Machinery

1. Medical Equipment
2. Etc.

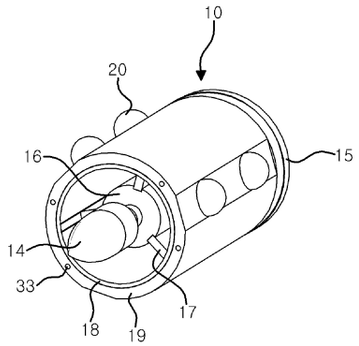
Medical Equipment

Appl. No. (Date)	PCT / KR2011 / 005915 (2011-08-11) Core
Pub. No.	WO2012 / 021015
Title of the invention	Method for simultaneously detecting fluorescence and raman signals for multiple fluorescence and raman signal targets, and medical imaging device for simultaneously detecting multiple targets using the method
Inventors	JEONG, Dae Hong | KANG, Keon Wook | LEE, Dong Soo | LEE, Yoon Sik | KIM, Gun Sung | JUN, Bong Hyun | PAENG, Jin Chul | LEE, Ho Young | LEE, Yun Sang
Gist of the invention	A method for simultaneously detecting fluorescence/raman signals and a medical imaging device using the method
Figure	
Claim 1	A method for simultaneously detecting fluorescence and Raman signals for multiple targets comprising the steps of: injecting at least one marker particle comprising Raman markers and receptors into the body of an animal including a human; irradiating a laser beam onto the body of the animal; and detecting by separating the optical signals emitted after the irradiation of the laser beam into fluorescence signals and Raman signals respectively.
Related US patents	US20100270463A | US8018582B

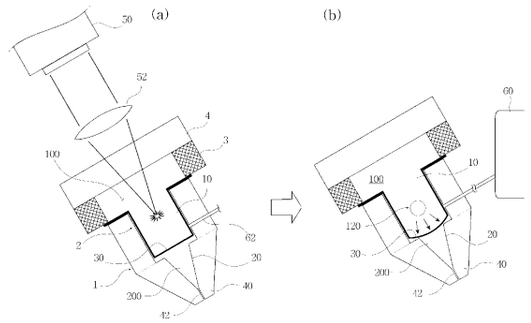
Medical Equipment

Appl. No. (Date)	PCT / KR2010 / 003372 (2010-05-27) Core
Pub. No.	WO2011 / 132817
Title of the invention	Robot for removing impurities by moving in pipe
Inventors	AHN, Sung Hoon | LEE, Gil Yong | WIE, Kyung Hoon
Gist of the invention	A robot capable of removing impurities by moving inside a pipe
Figure	
Claim 1	A robot comprising: a motor; an impeller which is mounted on one end of a rotational shaft of the motor, and changes the rotational force of the motor into a driving force; an impurity-removing device which is mounted on the other end of the rotational shaft of the motor, and removes impurities in a fluid on the front; An internal housing which includes a sealing device for preventing the invasion of an external fluid, and protects the motor; an external housing; at least one support which connects and fixes the internal housing and the external housing; and a cover, on which a power supply device configured to supply power in contact with an outer side of the external housing and a plurality of measurement devices configured to measure the internal state of the fluid are mounted.

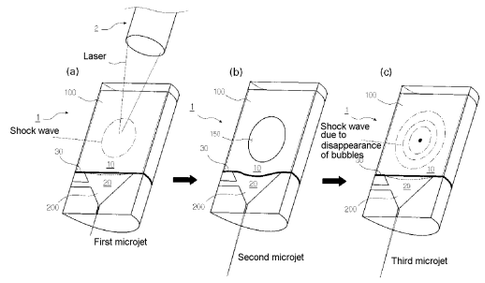
Medical Equipment

Appl. No. (Date)	**PCT / KR2011 / 002820** (2011-04-20) Core
Pub. No.	WO2011 / 132925
Title of the invention	Mobile robot capable of being immersed in a fluid
Inventors	AHN, Sung Hoon | LEE, Gil Yong | WIE, Kyung Hoon
Gist of the invention	A mobile robot which can be immersed in a fluid without interrupting a flow of the fluid
Figure	
Claim 1	A mobile robot which can be immersed in a fluid comprising: a robot body which is opened respectively at front and back of the body thereof so as to move forward and backward without interrupting a flow in a fluid or a tube containing fluid and at the axial center of which a motor is embedded so as to rotate for generating the power required for moving the robot and a impeller is embedded to be rotatable at a back end of the motor so as to generate the propulsive force of the body by rotating of the motor; a power source unit and a control unit arranged within the robot body so as to supply operating the power and control signals required for rotating the motor and the impeller, respectively; a plurality of measuring units arranged in the robot body to collect a variety of information on the fluid or the fluid in the tube; and a communication unit arranged in the robot body to carry out communications for exchanging information between the control unit and an external control device.

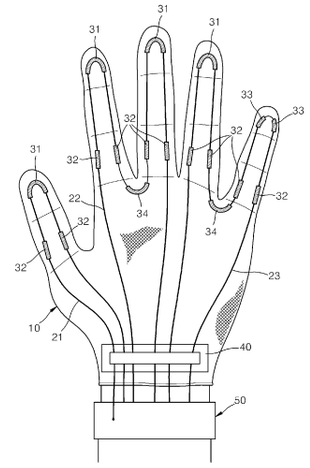
Medical Equipment

Appl. No. (Date)	**PCT / KR2010 / 003603** (2010-06-04) Core
Pub. No.	WO2011 / 115328
Title of the invention	Microjet drug delivery system
Inventors	YOH, Jai-Ick |HAN, Tae-Hee
Gist of the invention	A microjet drug delivery system for microjet spraying a drug solution using gas bubbles
Figure	
Claim 1	The microjet drug delivery system comprising: a pressure chamber completely filled with the liquid for propelling pressure, having a certain accommodation space; a drug chamber for accommodating a drug solution in a predetermined accommodation space, provided adjacent to the pressure chamber; an energy focusing unit for generating bubbles by concentrating energy to the liquid for generating pressure stored in the pressure chamber and evaporating of the liquid for generating pressure; a elastic film arranged between the pressure chamber and the micro drug chamber; a microjet nozzle connected with one side of the micro drug chamber so as to be formed as a path for allowing the drug solution stored inside the micro drug chamber to be microjet sprayed to the outside.
Related US patents	US2007-0265696A | US8118753B

Medical Equipment

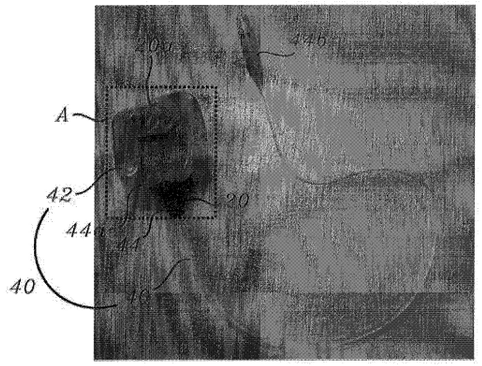
Appl. No. (Date)	**PCT / KR2011 / 001834** (2011-03-16) Core
Pub. No.	WO2011 / 115422
Title of the invention	Microjet drug delivery system and microjet injector
Inventors	YOH, Jai-Ick | HAN, Tae-Hee
Gist of the invention	A microjet drug delivery system that injects by microjet spraying a drug solution
Figure	
Claim 1	A microjet drug delivery system comprising: a microjet injector including: a pressure chamber completely filled with the liquid for propelling pressure, having a certain accommodation space; an elastic film, which is a film member made of an elastic material, arranged so as to form a closed space by closing the opened side of the pressure chamber; a drug chamber for accommodating a drug solution in a predetermined inner space, provided adjacent to the pressure chamber with interposing the elastic film therebetween; and a microjet nozzle connected with the inner space of the pressure chamber so as to be formed as a channel for allowing the drug solution stored inside the pressure chamber to be microjet sprayed to the outside; an energy focusing device for generating bubbles in the liquid for propelling pressure stored in the pressure chamber by applying a concentrated energy to the liquid for propelling pressure; and a connecting adaptor for selectively detachably coupling the microjet injector to the energy focusing device.
Related US patents	US2007-0265696A | US8118753B

Medical Equipment

Appl. No. (Date)	**PCT / KR2010 / 007168** (2010-10-19)
Pub. No.	WO2012 / 018159
Title of the invention	Glove-type wearable robot
Inventors	CHO, Kyu-Jin | IN, Hyunki | SIN, Minki
Gist of the invention	A glove-type wearable robot which moves the fingers of a user through the exoskeleton structure thereof
Figure	
Claim 1	A glove type wearable robot comprising: a glove member which is wearable on the hand; at least one of a wire arranged on the glove member so as to extend toward a tip direction of at least one finger of the glove's fingers and to change the direction to extend towards a root direction of its finger; at least one wire guide to guide a movement of the wire that is fixed on the glove member and configured to pass through the wire; and at least one driving portion that is connected at least one end of both ends of the wire to pull or release the wire.

Appl. No. (Date)	**PCT / KR2011 / 002348** (2011-04-05)
Pub. No.	WO2011 / 126258
Title of the invention	Amniotic fluid collector
Inventors	YOON, Bo Hyun | PARK, Chan Wook | LEE, Seung Mi | PARK, Joong Shin
Gist of the invention	An amniotic fluid collector which is configured to be inserted and positioned inside the uterus of a pregnant woman

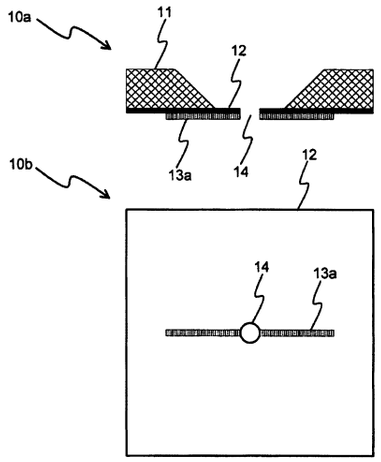
Figure



Claim 1	An amniotic fluid collector is configured so as to be inserted and positioned inside the uterus of a pregnant woman in order to collect amniotic fluid from the uterus of the pregnant woman.
Related US patents	US2009-0281456A

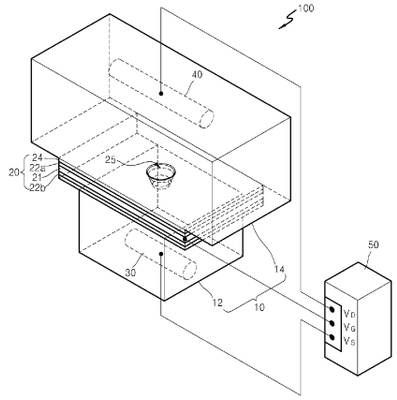
Appl. No. (Date)	**PCT / KR2011 / 003008** (2011-04-26)
Pub. No.	WO2011 / 136527
Title of the invention	Nanofluidic fluorescence apertureless near-field scanning optical microscope
Inventors	CHUN, Honggu
Gist of the invention	A fluorescence apertureless near-field scanning optical microscope which is capable of focusing outputs of fluorescence signals to a specific direction

Figure

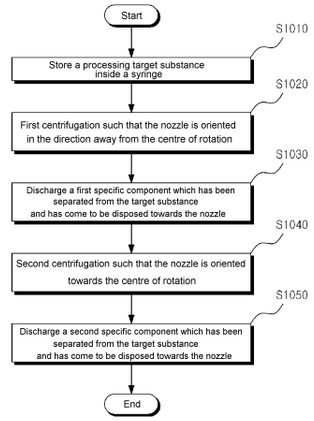


Claim 1	The nanofluidic fluorescence apertureless near-field scanning optical microscope comprising: a nanoantenna which focuses incident light in a narrow space, changes the quantum yield of the fluorescent sample in the narrow space, and focuses outputs of fluorescence signals generated in the narrow space to a specific direction; and a nanopore or a nanochannel connected to the narrow space of the nanoantenna to provide a path for introducing the fluorescent sample to the narrow space.

Medical Equipment

Appl. No. (Date)	**PCT / KR2011 / 004653** (2011-06-27)
Pub. No.	WO2011 / 162582
Title of the invention	DNA analysis device using nano pore structure, analysis method and PCR quantitative detecting device
Inventors	KIM, Ki Bum | KIM, Hyun Mi | LEE, Min Hyun
Gist of the invention	DNA analysis device/method/PCR quantitative detecting device using nanopore structure
Figure	
Claim 1	A DNA analysis device using a nanopore structure comprising: a chamber receiving a solution and having a first area and a second area; a first electrode positioned in the first area; a second electrode positioned in the second area opposed to the first electrode; a nanopore film positioned between the first electrode and the second electrode and having a conductive layer and nano pores penetrating the conductive layer; and an electric signal section electrically connected to the conductive layer, the first electrode and the second electrode, applying first electric signals thereto and receiving second electric signals therefrom, wherein DNA in the solution is detected using the second electric signals.

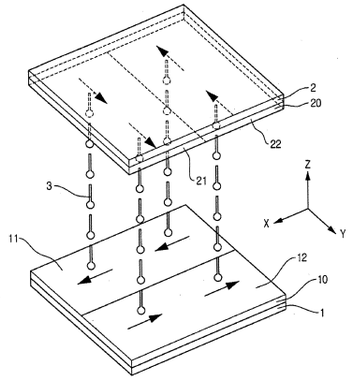
Medical Equipment

Appl. No. (Date)	**PCT / KR2011 / 007556** (2011-10-12)
Pub. No.	WO2012 / 050351
Title of the invention	Centrifugation method and centrifugation device
Inventors	JO, Chris Hyunchul | SHIN, Sue | YOON, Kang Sup
Gist of the invention	A centrifugation method/device capable of first/second centrifugation using a single syringe
Figure	
Claim 1	A centrifugation method using a syringe having a nozzle formed in one end thereof comprising the steps of: storing a processing target substance inside the syringe; carrying out a first centrifugation of the processing target substance which is inside the syringe; discharging, via the nozzle, a specific component which has come to be disposed towards the nozzle as a result of the first centrifugation; disposing the same syringe in the other direction, and carrying out a second centrifugation of the processing target substance which is inside the syringe; and discharging, via the nozzle, another specific component which has come to be disposed towards the nozzle as a result of the second centrifugation.

Etc.

Appl. No. (Date)	**PCT / KR2010 / 005116** (2010-08-04)
Pub. No.	WO2011 / 152590
Title of the invention	Liquid crystal display device, method for manufacturing the same and method for manufacturing substrate for alignment of liquid crystal
Inventors	LEE, Sin-Doo | JEONG, Deog-Kyoon | NA, Jun-Hee
Gist of the invention	A method for manufacturing substrate for alignment of liquid crystal ensuring wide viewing angle and alignment stability

Figure

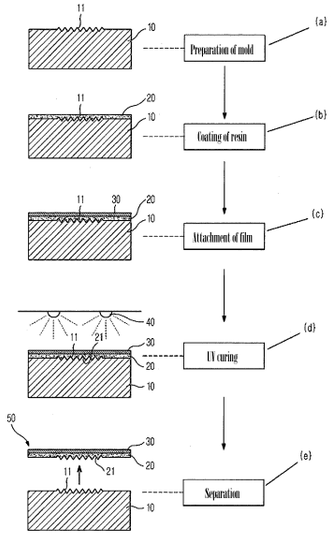


Claim 1	A liquid crystal display device comprising: a first substrate; a second substrate opposed to the first substrate; a first vertical alignment layer disposed on the first substrate, the first vertical alignment layer comprising a first region having a first alignment direction and a second region having a second alignment direction; a second vertical alignment layer disposed on the second substrate, opposed to the first vertical alignment layer, the second vertical alignment layer comprising a third region having a third alignment direction and a fourth region having a fourth alignment direction; and a liquid crystal interposed between the first vertical alignment layer and the second vertical alignment layer, wherein the first to fourth alignment directions are different from one another.

Etc.

Appl. No. (Date)	**PCT / KR2011 / 001589** (2011-03-08)
Pub. No.	WO2011 / 115383
Title of the invention	Film type soft stamper, preparation method thereof, and mold for injection molding and injection molding method using same
Inventors	PARK, Si Hawn | LEE, Dong Eon | KANG, Seock Hwan | LEE, Woo Il
Gist of the invention	A film type soft stamper comprising a soft film and a pattern molding layer

Figure

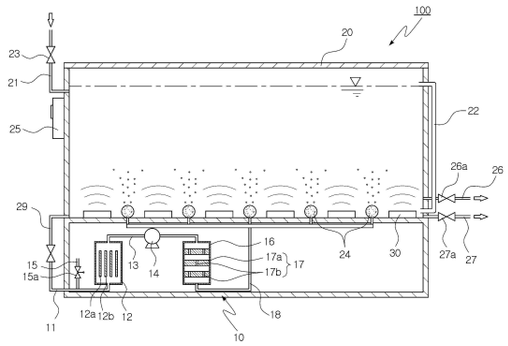


Claim 1	A film type soft stamper comprising: a soft film attached to the inner surface of the cavity of a mold; and a pattern molding layer having a pattering portion for molding a pattern to a molded product, prepared by coating a radiation curing resin on one surface of the film.

Etc.

Appl. No. (Date)	**PCT / KR2011 / 003920** (2011-05-27)
Pub. No.	–
Title of the invention	Fine bubble generating device with positive charge and water treatment device using the same
Inventors	HAN, Moo Young | KIM, Choong Il
Gist of the invention	A water treatment device exhausting a fine bubble with a positive charge

Figure

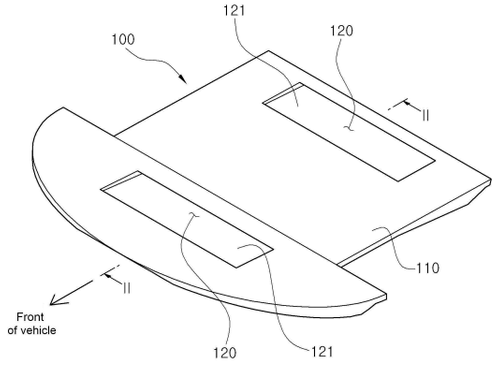


Claim 1	A fine bubble generating device with the positive charge comprising: A electrolytic bath performing a electrolysis of a treatment water, that is equipped with a positive electrode plate and a negative electrode plate in inner space supplying a fixed quantity of the treatment water; and A mixing tank in which the treatment water is pressured and supplied by pump provided in the middle of a supplying water pipe extended from the electrolytic bath, an air supplied via an adjustment valve of an inflow air is supplied, and at least one inner nozzle which forms a micro bubble while passing the treatment water which is mixed with the air is provided in the plural in the inner space, wherein the treatment water is exhausted to outward together with the micro bubble charged with the positive charge which is generated from electrolysis via an exhaust hole of the mixing tank.

Etc.

Appl. No. (Date)	**PCT / KR2011 / 009544** (2011-12-12)
Pub. No.	–
Title of the invention	Vehicle undercover and vehicle comprising the same
Inventors	KIM, Kyu Hong | LEE, Dong Ho | LEE, Young Bin | KIM, Tae Kyung
Gist of the invention	A vehicle undercover forming an air exhaust aperture along an air flow direction

Figure

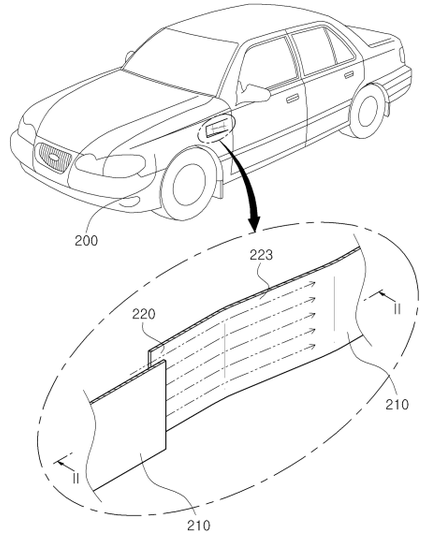


Claim 1	A vehicle undercover which covers a lower part of a vehicle's engine room comprising: a body to be configured so as to mount on the lower part of the vehicle's engine room; wherein, among the surfaces forming the exhaust aperture, an air-exhaust aperture is formed on the body; and any one surface of both surfaces, which are positioned along an air flow direction passing through the lower part of the vehicle is formed so as to give a slope, along the air flow direction.

Etc.

Appl. No. (Date)	**PCT / KR2011 / 009545** (2011-12-12)
Pub. No.	-
Title of the invention	Exhaust structure on engine room for vehicle and vehicle comprising the same
Inventors	KIM, Kyu Hong | LEE, Dong Ho | LEE, Young Bin | KIM, Tae Kyung
Gist of the invention	An exhaust structure for vehicles forming an air exhaust aperture along an air flow direction

Figure

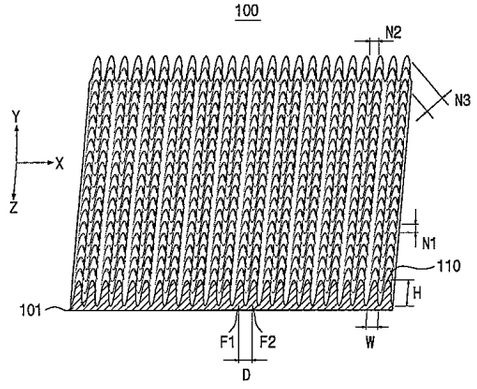


Claim 1	An exhaust structure of an engine room for a vehicle comprising: an exhaust aperture which formed on a side portion of a vehicle body forming the engine room, wherein, among the surfaces forming the exhaust aperture, any one surface of both surfaces, which are positioned along an air flow direction passing through the side portion of the vehicle is formed so as to give a slope, along the air flow direction passing through the side portion of the vehicle.

Etc.

Appl. No. (Date)	**PCT / KR2012 / 001021** (2012-02-10)
Pub. No.	-
Title of the invention	Metallic microstructure and processing method thereof
Inventors	LEE, Se Won | SHIN, Hong Sik | JU, Jong Nam | KIM, Han | SHIN, Sang Jae
Gist of the invention	A method for processing metallic structure which melts an re-coagulates a dross repeatedly by laser processing

Figure



Claim 1	A method for manufacturing metallic structure in which an array of a plural pin arrangements on metal surface is formed, comprising the steps of: performing a laser processing along a path between pin areas to form pins on a base metal and forming a dross on the pin area; and performing the laser processing repeatedly, wherein a re-coagulated layer is formed in a shape of the pin by melting and re-coagulating repeatedly the dross formed on each pin area, during repeated laser processing.
Related US patents	US2011-0271497A

List of Our US Patents

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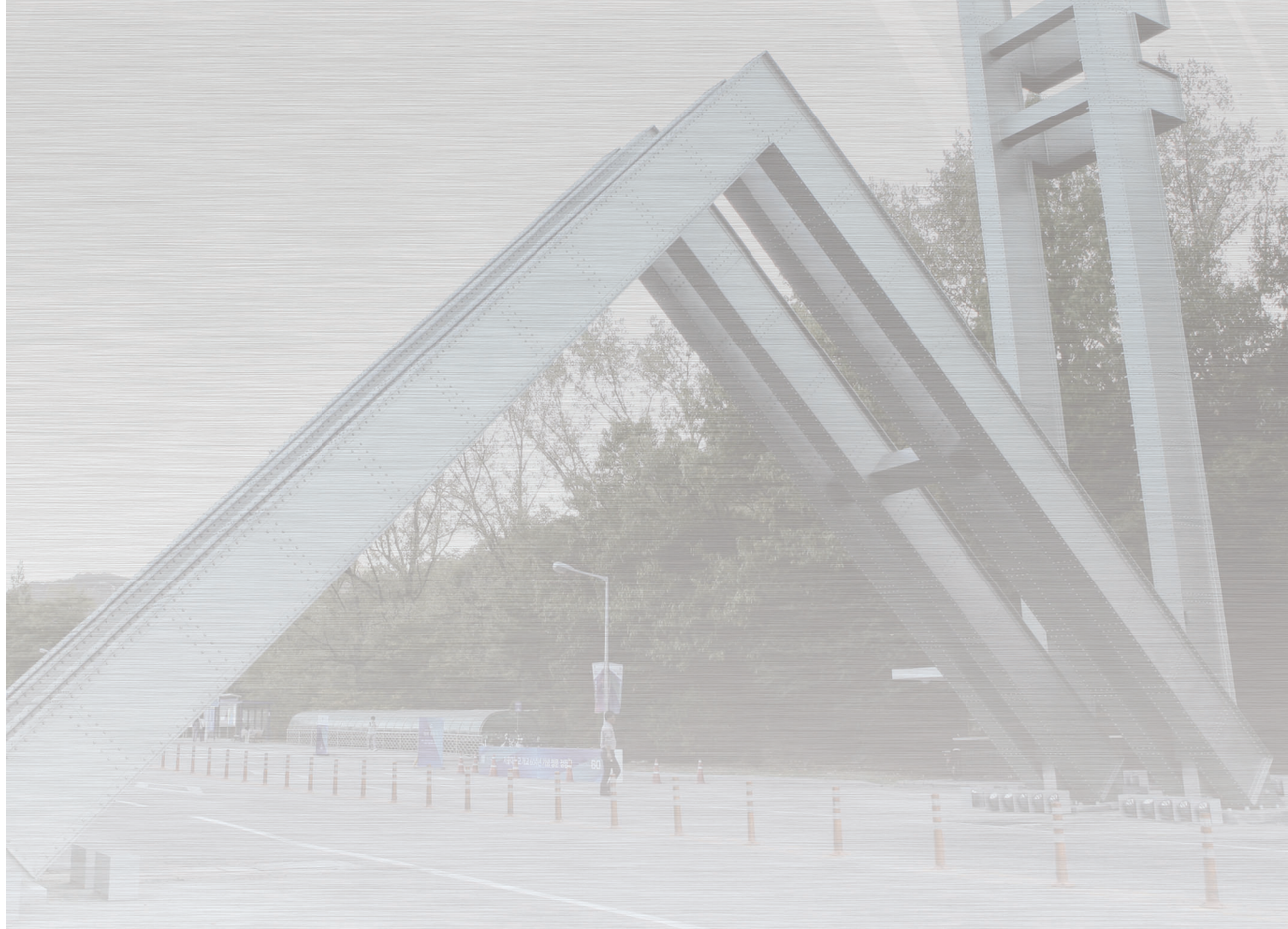

SECTION A
HUMAN NECESSITIES

No.	Application		Title of Invention	Inventors	Publication Number	Patent Number	Main IPC
	Number	Date					
1	1999-381933	1999-09-27	PHARMACEUTICAL COMPOSITION, CONTAINING MEDIUM-CHAIN FATTY ACIDS AS ACTIVE INGREDIENTS, FOR DENTAL CARIES AND PERIODONTAL DISEASE	Min; Byung-Moo		6180599	
2	1999-442630	1999-11-18	ANTI-APOPTOTIC USE OF HUMAN GLUTAMINYL-TRNA SYNTHETASE WITH TWO CONSECUTIVE PRO-APOPTOTIC MEDIATORS	Sunghoon Kim		6548060	A61K-031/185
3	2001-765576	2001-01-22	CERAMIC DEODORIZER	Kug Sun Hong | Dong-Wan Kim | Sang-Gu Kang | Hyun-Seung Ryu | Su-Jin Kim | Dong-Ho Lee	2002-0031489	6579518	A61L-011/00
4	2001-922070	2001-08-03	INHIBITOR OF REPLICATIVE SENESCENCE OF HUMAN KERATINOCYTES CONTAINING RETINOIC ACID ASACTIVE INGREDIENTS	Min; Byung-Moo	2002-0123526	6566399	A61K-031/203
5	2002-469198	2002-03-08	DIAMINEDITHIOL DERIVATIVES AND RADIORHENIUM OR RADIOTECHNETIUM COMPLEX THEREOF; A LIVERCANCERTREATING COMPOSITION COMPRISING THE RADIORHENIUM COMPLEX AND LIPIODOL; AND A KIT FOR PREPARATION OF THE LIVER CANCER-TREATING COMPOSITION	Jae Min Jeong | Young Ju Kim | Yun-Sang Lee | Dong Soo Lee | June-Key Chung | Myung Chul Lee	2004-0087567	7067508	A01N-043/00
6	2003-648217	2003-08-27	BIODEGRADABLE AND BIOACTIVE GLASS-CERAMICS, AND METHOD FOR FABRICATING THE SAME	Hyun Seung Yu | Kug Sun Hong | Hwan Kim | Dong Ho Lee | Choon Ki Lee | Bong Soon Chang | Deug Joong Kim | Jun Hyuk Seo | Jae Hyup Lee | Ki Soo Park	2004-0043053	7582310	A61F-002/28
7	2003-723401	2003-11-26	POROUS BIOCERAMICS FOR BONE SCAFFOLD AND METHOD FOR MANUFACTURING THE SAME	Hyoun-Ee Kim | Hea-Won Kim	2005-0113934	7416564	A61F-002/28
8	2003-742486	2003-12-18	MULTI-FUNCTIONAL INFANT-CARRYING DEVICE	Ho-Young Lee	2004-0145133	6988736	A47D-013/10
9	2004-809509	2004-03-26	METHOD FOR PRODUCING POLYMERIC SOL OF CALCIUM PHOSPHATE COMPOUND AND METHOD FOR COATING THE SAME ON A METAL IMPLANT	Hyun Seung Yu | Dong Soo Lee | Kug Sun Hong | Choon Ki Lee | Jae hyup Lee | Dong Ho Lee | Bong Soon Chang | Jin Young Kim | Sung Soo Chung	2005-0158399	7351433	A61K-033/42
10	2004-903361	2004-07-30	MUSCULAR MOTION SIMULATING SYSTEM	In-Hwang Park | In-Bae Chang | Dong-Chul Han		6912900	A61B-005/22
11	2005-284384	2005-11-21	CATHETER CAPABLE OF BEING EQUIPPED WITH MICRO BIOPSY TOOL	Dong-il Cho | Sun Kil Park | Ah Ra Lee | Seung Joon Paik | Myoung Jun Jeong | Hyun Min Choi | Jung Min Lim	2006-0241488	7927289	A61B-010/00
12	2005-571890	2005-03-23	BIOPOLYMER AND GENE COMPLEX	Myoung Haing Cho | Chong Su Cho	2007-0231270	8066978	A61K-031/74
13	2005-593430	2005-03-18	BONE GRAFT AND SCAFFOLDING MATERIALS IMMOBILIZED WITH OSTEOGENESIS ENHANCING PEPTIDES ON THE SURFACE	Yoon Jeong Park | Chong-Pyoung Chung | Seung Jin Lee | Sang Hoon Rhee	2007-0160681	7897163	A61K-038/00

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No.	Application		Title of Invention	Inventors	Publication Number	Patent Number	Main IPC
	Number	Date					
14	2005-631704	2005-08-31	APPARATUS AND METHOD FOR MEASURING ELECTRIC NON-CONTACT ELECTROCARDIOGRAM IN EVERYDAY LIFE	Kwang-Suk Park | Yong-Kyu Lim | Ko-Keun Kim	2007-0255152	7684854	A61B-005/0444
15	2005-631908	2005-10-27	APPARATUS FOR ANALYZING A SLEEP STRUCTURE ACCORDING TO NON-CONSTRAINED WEIGHT DETECTION	Kwang-Suk Park	2007-0191742		A61B-005/103
16	2006-299799	2006-05-12	METHOD FOR PREPARING A PRION-FREE BOND GRAFTING SUBSTITUTE	Sang-Hoon Rhee | Chong-Pyoung Chung | Yoon-Jeon Park	2009-0304807		A61K-035/32
17	2006-457773	2006-07-14	PROCESS FOR SCREENING OF A BINDING PEPTIDE SPECIFIC FOR SPECIFIC RNA AND RNA BINDING PEPTIDES THEREFROM	Jae-hoon Yu	2008-0318797	7999070	A61K-038/00
18	2006-718391	2006-04-27	B CELL-BASED VACCINE LOADED WITH THE LIGAND OF NATURAL KILLER T CELL AND ANTIGEN	Chang-Yuil Kang | Yeonseok Chung | Hyun-Jeong Ko | Yeon-Jeong Kim | Byung-Seok Kim | Sung-Youl Ko	2010-0028380	8003093	A01N-063/02
19	2006-816925	2006-02-24	THIAZOLE DERIVATIVES AS PPAR DELTA LIGANDS AND THEIR MANUFACTURING PROCESS	Heonjoong Kang | Jungyeob Ham | Hoosang Hwang	2009-0054493		A61K-031/426
20	2006-995505	2006-04-03	VACCINE COMPOSITION COMPRISING ALPHA-GALACTOSYLCERAMIDE AS AN ADJUVANT FOR INTRANASAL ADMINISTRATION	Chang-Yuil Kang | Sung-Youl Ko	2008-0317769		A61K-039/00
21	2007-067731	2007-05-03	QUORUM SENSING ANTAGONIST, METHOD OF PREVENTING A BIOFILM FORMATION USING THE QUORUM SENSING ANTAGONIST AND METHOD OF REDUCING A BACTERIAL CONTAMINATION USING THE QUORUM SENSING ANTAGONIST	Je-Yong Yoon | Cheol-Jin Kim | Jae-Eun Kim | Hyung-Yeon Park	2010-0292261		A01N-043/54
22	2007-278009	2007-01-19	BONE GRAFT AND SCAFFOLDING MATERIALS IMMOBILIZED WITH TYPE I COLLAGEN BINDING PEPTIDES	Yoon-Jeong Park | Chong-Pyoung Chung | Seung-Jin Lee | Jue-Yeon Lee	2011-0045048		A61K-038/08
23	2007-279166	2007-11-28	VACCINE COMPRISING MONOCYTE OR IMMATURE MYELOID CELLS (IMC) WHICH WERE LOADED WITH THE LIGAND OF NATURAL KILLER T CELL AND ANTIGEN	Chang-Yuil Kang | Hyun-Jeong Ko | Jung-Mi Lee | Yeon-Jeong Kim	2009-0285851		A61K-039/02
24	2007-299496	2007-05-02	PREPARATION METHOD OF POROUS HYALURONIC ACID SPONGE FOR CELL DELIVERY SYSTEM	Dae-Duk Kim | Jeong-Yeon Kang | Chung-Wook Chung | In-Soo Yoon | Sun-Young Kim | Byung-Soon Park | Jong-Hyuk Sung	2011-0268706		A61K-035/12
25	2007-300281	2007-05-12	MULTIPOTENT ADULT STEM CELL DERIVED FROM CANINE UMBILICAL CORD BLOOD, PLACENTA AND CANINE FETUS HEART, METHOD FOR PREPARING THE SAME AND CELLULAR THERAPEUTICS CONTAINING THE SAME	Kyung Sun Kang | Oh Kyung Kwon | Yun Hyeok Jeong | Ji Hey Lim | Chang Soo Jung	2010-0021436		A61K-035/12
26	2007-311786	2007-08-17	ANTIBODIES TO IP-10 FOR TREATING BONE DISEASES WITH BONE DESTRUCTION	Young Wook Song | Zang Hee Lee | Eun Bong Lee | Eun Young Lee	2010-0021463		A61K-039/395
27	2007-376799	2007-08-09	NEUROBIOLOGICAL METHOD FOR MEASURING HUMAN INTELLIGENCE AND SYSTEM FOR THE SAME	Kun Ho Lee | Yu Yong Choi | Kyung Jin Kim | Jong Min Lee	2010-0174171		A61B-005/055

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No.	Application		Title of Invention	Inventors	Publication Number	Patent Number	Main IPC
	Number	Date					
28	2007-513337	2007-11-05	COMPOSITION FOR TREATMENT OF CERVIX CANCER	Young Kee Shin | Hun Soon Jung | Yu Kyoung Oh	2010-0062051		A61K-009/127
29	2007-516968	2007-11-30	PHARMACEUTICAL COMPOSITION COMPRISING METADOXINE AND GARLIC OIL FOR PREVENTING AND TREATING ALCOHOL-INDUCED FATTY LIVER AND STEATOHEPATITIS	Sang Geon Kim | Sung Hwan Ki | Jae Hoon Choi	2010-0062090	8158170	A61K-036/8962
30	2007-519313	2007-12-14	PHARMACEUTICAL COMPOSITION, HEALTH FOOD COMPOSITION AND INOS INHIBITORS, CONTAINING THEOPEDERIN DERIVATIVES	Heonjoong Kang | Sang-Jip Nam | Hyun-Sil Ko	2010-0105763		A61K-031/357
31	2007-521487	2007-12-27	ALPHA-GALACTOSYLCERAMIDE DERIVATIVES, PHARMACEUTICALLY ACCEPTABLE SALTS THEREOF, PREPARATION METHOD AND PHARMACEUTICAL COMPOSITION FOR THE IMMUNE ADJUVANT CONTAINING THE SAME AS AN ACTIVE INGREDIENT	Chang-Yuil Kang | SangHee Kim | Hyun-Jun Youn | Yoon-Sook Lee | Kyoo-A Lee | Taeho Lee | Dong Jae Baek | Minjae Cho	2010-0104590		A61K-031/7028
32	2007-762077	2007-06-13	METHOD FOR PRODUCING CLONED DOG	Byeong Chun Lee | Sung Keun Kang | Dae Yong Kim | Min Kyu Kim | Goo Jang | Hyun Ju Oh | M. Shamim Hossein | Fibrianto Yuda | Hye Jin Kim | So Gun Hong | Jung Eun Park | Joung Joo Kim	2008-0295191	8124832	A01K-067/027
33	2007-788928	2007-04-23	STENT AND FABRICATION METHOD THEREOF	Woong-Ryeol Yu | Ju-Hyun Kim | Suk-Jin Hong | Joon-Seok Lee | Jae-Heung Yoo	2007-0265696		A61F-002/06
34	2007-902641	2007-09-24	USE OF AIM3 ACTING AS A TUMOR SUPPRESSOR	Sung-Hoon Kim		7902165	A61K-048/00
35	2007-967132	2007-12-29	COMPOSITION OF BONE FORMATION WITH PHSRN-RGD CONTAINING OLIGOPEPTIDE	Chong-Pyoung Chung | Young Ku | Gene Lee | Jun-Hyeog Jang | Tae-Il Kim	2009-0010988	7897722	A61K-038/00
36	2007-992474	2007-03-13	MOVEMENT ANALYSIS DEVICE FOR RODENTS	Kyu-Chang Wang | Sun-Ha Paek | Byung-Woo Yoon | Se-Pil Park | Do-Hun Lee	2010-0218729		A01K-001/03
37	2007-999989	2007-12-07	THREE-DIMENSIONAL MICRO SPIKE AND METHOD OF MANUFACTURING THE SAME	Dongil Cho | Ahra Lee | Seung-Joon Paik | Myoung-Jun Jeong | HyunMin Choi | Jung-Min Lim | Sunkil Park | Kyo-In Koo | Jae Won Ban	2008-0167576		A61B-010/00
38	2008-059006	2008-08-18	METHOD FOR CONTROLLING CANCER METASTASIS OR CANCER CELL MIGRATION BY MODULATING THE CELLULAR LEVEL OF LYSYL TRNA SYNTHETASE	Sunghoon Kim | Jin Woo Choi	2011-0189195		A61K-039/395
39	2008-069592	2008-02-12	BARB-WIRED MICRO NEEDLE MADE OF SINGLE CRYSTALLINE SILICON AND BIOPSY METHOD AND MEDICINE INJECTING METHOD USING THE SAME	Dong-il Cho | Seung Joon Paik | Jung Min Lim | Ah Ra Lee | Sang Won Byun | Kyo-In Koo	2008-0208076	8118753	A61B-010/00
40	2008-127696	2008-11-06	FLUORINATED BENZOTHIAZOLE DERIVATIVES, PREPARATION METHOD THEREOF AND IMAGING AGENT FOR DIAGNOSING ALTZHEIMER'S DISEASE USING THE SAME	Sang Eun Kim | Byung Chul Lee | Ji Sun Kim | Young Sin Chun	2011-0250136		A61K-051/04

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No.	Application		Title of Invention	Inventors	Publication Number	Patent Number	Main IPC
	Number	Date					
41	2008-185860	2008-08-05	NONWOVEN NANOFIBROUS MEMBRANES OF SILK FIBROIN FOR GUIDED BONE TISSUE REGENERATION AND THEIR PREPARATION METHOD	Chong-Pyoung Chung | Won-Ho Park | Kyoung-Hwa Kim | Lim Jeong	2008-0292667		A61K-009/10
42	2008-306472	2008-01-03	APPARATUS FOR COLLECTING THE AMNIOTIC FLUID FROM THE UTERUS	Joong Shin Park | Bo Hyun Yoon | Jong Kwan Jun	2009-0281456		A61B-010/00
43	2008-522358	2008-01-08	THIAZOLE COMPOUND (AS PPAR DELTA) LIGAND AND PHARMACEUTICAL, COSMETIC AND HEALTH FOOD COMPRISED THEREOF	Heonjoong Kang | Jae-Young Ko | Hoo-Sang Hwang	2010-0041723		A61K-031/426
44	2008-736218	2008-03-21	COMPOSITION FOR TREATMENT AND IMPROVEMENT OF DIABETES COMPRISING CAVEOLIN AS ACTIVE INGREDIENT AND A METHOD FOR TREATMENT OF DIABETES USING IT	Sang Chul Park | Yoon Sin Oh	2011-0038799		A61K-049/00
45	2008-736768	2008-05-14	COMPOSITION FOR REGULATION CELLULAR SENESCENCE COMPRISING LYSOPHOSPHATIDIC ACID AND INHIBITOR OF ADENYLYL CYCLASE AS ACTIVE INGREDIENTS	Sang Chul Park | Eui Ju Yeo | Ji Heon Rhim	2011-0124607		A61K-031/661
46	2008-999005	2008-12-24	COMPOSITION COMPRISING EXPRESSION OR ACTIVITY INHIBITORS OF NINJURIN 1 FOR THE PREVENTION AND TREATMENT OF INFLAMMATORY DISEASE	Kyu-Won Kim | Hyo-Jong Lee	2011-0123538		A61K-039/395
47	2009-056279	2009-07-17	METHOD FOR SEPARATING HIGHLY ACTIVE STEM CELLS FROM HUMAN STEM CELLS AND HIGHLY ACTIVE STEM CELLS SEPARATED THEREBY	Hyo Soo Kim | Eun-Ju Lee | Hyun-Jae Kang	2011-0142809		A61K-035/12
48	2009-123522	2009-10-12	NOVEL USES OF GRS PROTEINS OR FRAGMENTS THEREOF	Sunghoon Kim | Min Chul Park	2011-0256119		A61K-038/53
49	2009-126979	2009-10-30	NOVEL COMPOUND WITH SPIRO CHIRAL CARBON BACKBONE, PREPARATION METHOD THEREOF, AND PHARMACEUTICAL COMPOSITION CONTAINING THE SAME	Heon-Joong Kang | Jung-Rae Rho | Jeong-Ho Hong | Seung-Bum Park | Chan-Soo Shin | Jae-Hwan Lee | Jun-Young Hong | Eun-O Kim | Jeong-Ah Kim | Sang-Mi Oh	2011-0218240		A61K-031/352
50	2009-408295	2009-03-20	NON-CONTACT PHOTOPLETHYSMOGRAPHIC PULSE MEASUREMENT DEVICE AND OXYGEN SATURATION AND BLOOD PRESSURE MEASUREMENT DEVICES USING THE SAME	Kwang Suk PARK | Hyun Jae Baek	2010-0185068		A61B-005/1455
51	2009-425955	2009-04-17	SCALE-TYPE NONCONSTRAINED HEALTH CONDITION EVALUATING APPARATUS AND METHOD	Kwang Suk PARK | Jae Hyuk SHIN	2010-0210921		A61B-005/02
52	2009-481137	2009-06-09	COMPOUNDS WITH EMBEDDED BENZOPYRAN MOTIF FOR CORE STRUCTURES AND PREPARATION METHOD THEREOF	Seung Bum Park | Hwan Jong Jang | Sung Kon Ko | EunHa Kim | Sangmi Oh | Jongmin Park	2009-0326015		A61K-031/41
53	2009-608126	2009-10-29	SYNTHESIS OF LIPOAMIDE-GRAFTED HIGH MOLECULAR COMPOUND AND METHOD THEREFOR	Insup NOH | Seongyeun JO | Doyeon KIM | Junghoon WOO	2010-0272761		A61K-047/30
54	2009-619644	2009-11-16	USE OF BIOLOGICAL SURFACTANT AS ANTI-INFLAMMATORY AGENT AND TISSUE PRESERVATIVE SOLUTION	Seung-yong Seong | Chang Gu Kang | Youn Hee Kim	2010-0267684		A61K-031/575

SECTION A
HUMAN NECESSITIES

No.	Application		Title of Invention	Inventors	Publication Number	Patent Number	Main IPC
	Number	Date					
55	2009-737553	2009-07-24	COMPOSITION FOR CONTROL OF AGING AND/OR EXTENSION OF LIFE, CONTAINING DAPSONE AS ACTIVE INGREDIENT	Sang Chul Park | Junho Lee | Sung Chun Cho | Moon Cheol Park | Yun Je Cho	2011-0152379		A61K-031/145
56	2009-737631	2009-07-29	SENESCENCE CONTROL COMPOSITION CONTAINING EXTRACELLULAR MATRIX COMPONENTS, AND SENESCENCE CONTROL METHOD FOR SENESCENT CELLS USING SAME	Sang Chul Park | Kyung A. Cho | Moon Kyung Ha | Hae Ri Choi	2011-0150899		A61K-039/395
57	2009-996751	2009-02-12	PHARMACEUTICAL COMPOSITION CONTAINING GLUR2-LACKING AMPAR ANTAGONIST FOR PREVENTING OR TREATING PSYCHIATRIC ILLNESSES	Sukwoo Choi | Sukwon Lee | Jeongyeon Kim | Beomjong Song | Ingie Hong | Sungmo Park | Jihye Kim | Junuk Lee | Bobae An | Kisoon Shin | Kyungjoon Park	2011-0105622		A61K-031/136
58	2009-997653	2009-06-12	COMPOSITION COMPRISED OF AKAP12 AND USES OF AKAP12 MUTANT ZEBRAFISH AS AN ANIMAL MODEL	Kyu-Won Kim | Hyouk-Bum Kwon	2011-0162092		A61K-038/45
59	2010-001658	2010-10-14	METHOD FOR TREATING PARKINSON'S DISEASE THROUGH REGULATING VDAC1 PROTEIN	Jongkyeong Chung | Yongsung Kim	2012-0088731		A61K-038/13
60	2010-055709	2010-10-06	METHOD FOR DIFFERENTIATION INTO RETINAL CELLS FROM STEM CELLS	Sung Sup Park | Ji Yeon Kim	2011-0223140		A61K-035/44
61	2010-143462	2010-01-07	COMPOSITION FOR IMPROVING INFLAMMATORY DISEASE USING ABH ANTIGENS	Jang Hee Oh | Ji-Yong Jung | Dong Hun Lee | Serah Lee | Yeon Kyung Kim | Jeong-eun Shin | June Hyunkyung Lee | Jin Ho Chung	2011-0274707		A61K-039/00
62	2010-144815	2010-02-12	DRY ADHESIVE FASTENER SYSTEM AND METHOD OF USING THE SAME	Kahp Yang Suh | Tae Il Kim | Chang Hyun Pang | Weon Gyu Bae	2011-0271497		A44B-018/00
63	2010-146280	2010-01-27	COMPLEX OF BIFUNCTIONAL CHELATING AGENT AND MANNOSYL HUMAN SERUM ALBUMIN	Jae Min Jeong | Myung Chul Lee | June Key Chung | Dong Soo Lee	2011-0286920		A61K-051/08
64	2010-322874	2010-04-26	PHARMACEUTICAL COMPOSITION FOR PROMOTING THE HEALING OF WOUNDS AND CONTAINING LYSOPHOSPHATIDIC ACID AND AN ADENYLYL CYCLASE INHIBITOR AS ACTIVE INGREDIENTS	Sang Chul Park | Eui Ju Yeo | Ji Heon Rhim	2012-0083472		A61K-031/661
65	2010-789917	2010-05-28	METHOD AND SYSTEM FOR DETECTING BOT SCUM IN MASSIVE MULTIPLAYER ONLINE ROLE PLAYING GAME	Chong Kwon KIM | H□laire Sylvain	2011-0256932		A63F-009/24
66	2010-809054	2010-01-21	METHOD FOR COATING MEDICATION ON MEDICAL ARTICLE	Jong-Sang Park | Dae-Joong Kim | In-Su Baek | Chengzhe Bai	2011-0183064		A61B-017/04
67	2010-844977	2010-07-28	MICROJET DRUG DELIVERY SYSTEM	Jai-Ick YOH | Tae-Hee HAN	2011-0230826		A61M-005/307
68	2010-851273	2010-08-05	PHARMACEUTICAL COMPOSITION FOR TREATING DEMENTIA COMPRISING SHRNA INHIBITING S100A9 EXPRESSION	Yoo-Hun Suh | Keun-A Chang	2011-0294866	8088751	A61K-048/00
69	2010-876367	2010-09-07	TWO PHOTON TRACER, METHOD FOR THE PREPARATION THEREOF AND THE USE THEREOF IN SCREENING ANTICANCER AGENTS	Seung Bum PARK | Bong Rae CHO | Hyang Yeon LEE | Jong Min PARK	2011-0059022		A61K-049/00

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No.	Application		Title of Invention	Inventors	Publication Number	Patent Number	Main IPC
	Number	Date					
70	2010-907475	2010-10-19	METHOD FOR PREPARING RECOMBINANT PEPTIDE FROM SPIDER VENOM AND METHOD FOR RELIEVING PAIN	UhTaek OH | Byung Moon Kim | Seung Pyo Park | Heung Sik Na	2012-0015886		A61K-038/17
71	2010-966696	2010-12-13	RECOMBINANT VECTORS CARRYING ZEARALENONE-INDUCIBLE PROMOTER AND METHODS FOR PRODUCING PROTEINS AND DETECTING ZEARALENONE USING THEM	Yin Won Lee | Jung Kwan Lee | Ae Ran Park | Seung Hoon Lee | Ho Kyung Son	2011-0154540		A01H-005/00
72	2010-982415	2010-12-30	METHOD FOR DEDIFFERENTIATING ADIPOSE TISSUE STROMAL CELLS	Soo-Kyung KANG	2012-0003186		A61K-035/12
73	2010-995247	2010-02-09	MAGNETICALLY-COUPLED BIPOLAR RADIOFREQUENCY ABLATION CATHETER	Seil Oh	2011-0087210		A61B-018/18
74	2011-162226	2011-06-16	COMPOSITION COMPRISING EXPRESSION OR ACTIVITY INHIBITORS OF NINJURIN1 FOR THE PREVENTION AND TREATMENT OF INFLAMMATORY DISEASE	Kyu-Won KIM | Hyo-Jong LEE	2011-0250193		A61K-039/395

No.	Application		Title of Invention	Inventors	Publication Number	Patent Number	Main IPC
	Number	Date					
1	1998-179144	1998-10-26	RAPID PROTOTYPING METHOD FOR MINIMIZING POST PROCESSING	Lee; Kun Woo | Cho; In Haeng		6146487	B32B-031/00
2	1998-183194	1998-10-30	PARALLEL MECHANISM FOR MULTI-MACHINING TYPE MACHINING CENTER	Kim; Jongwon | Park; Chongwoo | Bae; Wok-Kwan | Liu; Seon-joong | Kim; Jinwook | Hwang; Jae-chul | Park; Changbum | Cho; Han-Sang | Lee; Gyu-Young | Lee; Kiha | Lee; Yonghun | Iurascu; Cornel		6135683	B23C-001/12
3	2000-623230	2000-08-30	AUTOMATIC MACHINE FOR THE FORMATION OF SHIP'S CURVED HULL-PIECES	Shin; Jong Gye | Kim; Won Don		6334350	B21D-037/16
4	2001-857462	2001-06-05	PARALLEL MECHANISM STRUCTURE FOR CONTROLLING THREE-DIMENSIONAL POSITION AND ORIENTATION	Jongwon Kim | Chongwoo Park | Jae Chul Hwang | Jin-Sung Kim | Young-Oh Han		6503033	B23C-001/06
5	2002-490745	2002-01-22	SYNTHESIS OF MONO-DISPERSE AND HIGHLY CRYSTALLINE NANO-PARTICLES OF METALS, ALLOYS, METAL-OXIDES, AND MULTI-METALLIC OXIDES WITHOUT A SIZE-SELECTION PROCESS	Taeghwan Hyeon	2004-0247503	7407527	B22F-009/24
6	2004-486261	2004-02-03	PREPARATION OF NANO-SIZED ORGANIC-INORGANIC COMPOSITE MATERIAL	Kyung Hyun Ahn | Seung Jong Lee	2004-0191549	7211331	B32B-027/32
7	2004-883804	2004-07-06	WAKE DISTRIBUTING APPARATUS AND METHOD FOR REDUCING DRAG	Haecheon Choi | Jin Choi | Dongkon Lee | Jeonglae Kim | Woo-Pyung Jeon | Seonghyeon Hahn | Jinsung Kim	2005-0012358	7100969	B60J-001/00
8	2006-346401	2006-02-01	METHOD FOR FOCUSING PATTERNING NANO-SIZED STRUCTURE	Mansoo Choi | Jaehyun Kim | Hongjoo Yang	2006-0228491	7579050	B05D-001/04
9	2007-282345	2007-02-16	MULTIFERROIC LAYER, STRUCTURE INCLUDING THE LAYER, AND METHODS OF FORMING THE LAYER AND THE STRUCTURE	Tae Won Noh | Jong Gul Yoon | Jung Hyuk Lee	2009-0246543		B32B-015/04
10	2007-835710	2007-08-08	METHOD FOR PREPARING BLACK PHOSPHORUS OR BLACK PHOSPHORUS-CARBON COMPOSITE, LITHIUM RECHARGEABLE BATTERY COMPRISING THE PREPARED BLACK PHOSPHORUS OR BLACK PHOSPHORUS-CARBON COMPOSITE AND METHOD FOR USING THE RECHARGEABLE BATTERY	Cheol-Min Park | Hun-Joon Shon	2008-0038626	7744023	B02C-019/00
11	2008-055620	2008-03-26	VISIBLE LIGHT-RESPONSIVE PHOTOCATALYST COMPOSITION CONTAINING TUNGSTEN-BASED OXIDES AND METHOD OF PRODUCING THE SAME	In Sun Cho | Sang Wook Lee | Jun Hong Noh | Shin Tae Bae | Dong Wook Kim | Chin Moo Cho | Chae Hyun Kwak | Tae Hoon Noh | Duk Kyu Lee | Kug Sun Hong	2009-0192032		B01J-023/16
12	2008-194413	2008-08-19	CARBON NANOTUBE COMPOSITES	Yong Hyup Kim | Tae June Kang	2010-0047564		B32B-015/04
13	2008-195330	2008-08-20	ARRANGING MATERIALS ON A SUBSTRATE	Youngtack Shim	2010-0047446		B05D-001/40
14	2008-195347	2008-08-20	ENHANCED CARBON NANOTUBE WIRE	Yong Hyup Kim | Eui Yun Jang	2010-0047568		B05D-007/20

SECTION B
PERFORMING OPERATIONS; TRANSPORTING

No.	Application		Title of Invention	Inventors	Publication Number	Patent Number	Main IPC
	Number	Date					
15	2008-197568	2008-08-25	MAGNETIC NANOPARTICLES SURFACE-MODIFIED WITH DITHIOCARBAMATE	Jin-Kyu Lee	2010-0047578	8043702	B32B-005/16
16	2008-197754	2008-08-25	HYDROPHOBIC COMPOSITES AND METHODS OF MAKING THE SAME	Yong Hyup Kim | Seung Min Lee	2010-0047523		B32B-003/00
17	2008-197994	2008-08-25	MANUFACTURING NANOCOMPOSITES	Youngtack Shim	2010-0047570		B29C-047/02
18	2008-198790	2008-08-26	ARTICLE TREATED WITH SILICA PARTICLES AND METHOD FOR TREATING A SURFACE OF THE ARTICLE	Jin-Kyu Lee	2010-0055451	8153249	B32B-005/16
19	2008-198835	2008-08-26	CARBON NANOTUBE STRUCTURE	Yong Hyup Kim | Eui Yun Jang	2010-0055338	7959842	B28B-001/38
20	2008-198840	2008-08-26	CNT/METAL COMPOSITE CABLE	Yong Hyup KIM | Wal Jun KIM	2010-0052223		B06B-001/02
21	2008-200447	2008-08-28	MANUFACTURING NANOCOMPOSITES	Youngtack Shim	2010-0055385	8113811	B29C-047/06
22	2008-233339	2008-09-18	MANUFACTURING CARBON NANOTUBE ROPES	Yong Hyup Kim | Tae June Kang | Eui Yun Jang	2009-0223826		B05D-003/10
23	2008-234560	2008-09-19	SUPERHYDROPHOBIC POLYMER FABRICATION	Jin-Kyu Lee | Yuwon Lee | Kuk-Youn Ju	2009-0246473	7887736	B27N-003/18
24	2008-272333	2008-11-17	MAGNETIC CARRIER AND MEMBRANE BIOREACTOR COMPRISING ENZYME FOR INHIBITING BIOFILM FORMATION	Chung-Hak Lee | Kyung-Min Yeon	2009-0159533	7867392	B01D-035/06
25	2008-665143	2008-06-20	CALCIUM PHOSPHATE ULTRATHIN FILMS AND A METHOD FOR PREPARING THEM	Hyun Man Kim	2010-0183858		B32B-005/00
26	2008-681698	2008-10-01	FLUIDIC CHANNEL SYSTEM AND METHOD FOR FABRICATING FINE STRUCTURE	Sunghoon Kwon | JiYun Kim | Wook Park | HyunSung Park | SeungAh Lee | SuEun Chung	2011-0006464		B29C-035/08
27	2008-747396	2008-11-18	METHOD FOR ADSORPTION OF NANO-STRUCTURE AND ADSORPTION MATTER USING SOLID THIN FILM MASK	Seung-Hun Hong | Tae-Kyeong Kim	2010-0270265		B05D-001/32
28	2008-970218	2008-01-07	METHOD AND SYSTEM FOR PHOTOCATALYTICALLY DECOMPOSING ORGANIC POLLUTANTS USING ELECTROMOTIVE FORCE OF SOLAR CELL	Shin Tae Bae | Kug Sun Hong | Sang Wook Lee | In Sun Cho | Jun Hong Noh | Chin Moo Cho | Dong Wook Kim | Tae Hoon Noh | Chae Hyun Kwak	2009-0114604		B01J-019/08
29	2009-122829	2009-09-23	SEED-CONJUGATED POLYMER SUPPORT	Yoon-Sik Lee | Seung-Ryeoul Paik	2011-0259830		B01D-021/01
30	2009-265348	2009-04-24	METHOD OF FABRICATING SUBSTRATE WHERE PATTERNS ARE FORMED	Euijoon Yoon | Sung-Hoon Kwon	2012-0040092		B05D-005/00
31	2009-265366	2009-04-29	METHOD OF FABRICATING SUBSTRATE WHERE PATTERNS ARE FORMED	Euijoon Yoon | Sung-Hoon Kwon	2012-0040087		B05D-005/12
32	2009-265521	2009-04-20	METHOD OF FORMING HIERARCHICAL MICROSTRUCTURE USING PARTIAL CURING	Kahp Yang Suh | Hoon Eui Jeong | No Kyun Kwak	2012-0034390		B82B-003/00
33	2009-321272	2009-09-28	METAL COMPOSITE POWDER, SINTERED BODY, AND PREPARATION METHOD THEREOF	Shinhoo Kang	2012-0063943		B22F-001/00

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No.	Application		Title of Invention	Inventors	Publication Number	Patent Number	Main IPC
	Number	Date					
34	2009-359111	2009-01-23	SOLID-SOLUTION POWDER, METHOD TO PREPARE THE SOLID-SOLUTION POWDER, CERMET POWDER INCLUDING THE SOLID-SOLUTION POWDER, METHOD TO PREPARE THE CERMET POWDER, CERMET USING THE CERMET POWDER AND METHOD TO PREPARE THE CERMET	Shinhoo Kang		7892315	B22F-001/00
35	2009-534015	2009-07-31	REMOVAL OF BULGE EFFECTS IN NANOPATTERNING	Chae-Ho Shin | In-Su Jeon | Zheong Gou Khim	2010-0159229		B32B-003/26
36	2010-148795	2010-01-22	METHOD FOR MODIFYING THE SURFACE OF A BIOINERT MATERIAL	Jun Hong Noh | Dong Wook Kim | Jae Sul An | Hae Rin Chang | Dong Hoe Kim | Kug Sun Hong | Dong Kyu Chin	2012-0009341		B05D-005/00
37	2010-202040	2010-02-17	PRECURSOR POWDER FOR SINTERING USED FOR PREPARING DIELECTRIC MATERIAL AND PROCESS FOR PREPARING THE SAME	Sang-Im Yoo | Young-Mi Kim | Sung-Yun Lee | Goe-Myung Shin	2012-0040187		B32B-005/16
38	2010-849584	2010-08-03	NON-CONTACT TYPE TRANSDUCER FOR ROD MEMBER HAVING MULTI-LOOP COIL	Chan Il PARK | Sun Ho LEE | Yoon Young KIM	2011-0036172		B06B-001/04
39	2010-956073	2010-11-30	BICYCLE HANDLE ASSEMBLY	Sung-Hoon Ahn | Chung-Soo Kim | Min-Jee Roh	2011-0290067		B62K-021/16
40	2011-210274	2011-08-15	MANUFACTURING CARBON NANOTUBE PAPER	Yong Hyup Kim | Eui Yun Jang	2011-0300031		B01D-009/02
41	2011-216494	2011-08-24	METHOD FOR MANUFACTURING LIQUID DROPLET MICROARRAYS, MICROARRAYS PREPARED BY USING THE SAME, A DEVICE FOR DELIVERING MATERIALS AND A METHOD FOR DELIVERING MATERIALS BY USING A DEVICE FOR DELIVERING MATERIALS COMPRISING THE SAME	Sin-Doo LEE | Sang-Wook LEE | Seung Chul PARK	2012-0051985		B01L-003/00
42	2011-271674	2011-10-12	METHOD OF GENERATING STRUCTURAL COLOR	Sunghoon KWON | Hyoki Kim	2012-0064309		B32B-003/00
43	2011-985581	2011-01-06	SUPERHYDROPHOBIC POLYMER FABRICATION	Jin-Kyu Lee | Yuwon Lee | Kuk-Youn Ju	2011-0097534		B32B-033/00

SECTION C
CHEMISTRY; METALLURGY

No.	Application		Title of Invention	Inventors	Publication Number	Patent Number	Main IPC
	Number	Date					
1	1999-338070	1999-06-23	MCVD METHOD AND APPARATUS USING AN ELONGATED GAS FEEDING DEVICE	MANSOO CHOI | DONG-GEUN LEE	2002-0011084	6363754	C03B-037/018
2	2000-701839	2000-12-04	METHOD FOR PRODUCING CLONED COWS	Byeong-Chun Lee | Tae-Young Shin | Sang-Ho Roh | Jeong-Muk Lim | Jong-Im Park | Jong-Ki Cho | Ki-Yon Kim | Eun-Song Lee | Soo-Jung Shin | Sung-Ki Kim | Kil-Young Song | Woo-Suk Hwang		6590139	C12N-015/00
3	2001-363924	2001-07-06	NUCLEIC ACID SEQUENCES AND PROTEINS INVOLVED IN CELLULAR SENESCENCE	Sang-Chul Park | Woong-Yang Park | Jeong-Soo Park | Kyung-A Cho | Deok-In Kim	2005-0261265	7001769	C12N-005/02
4	2001-765575	2001-01-22	DIELECTRIC CERAMIC COMPOSITIONS AND METHOD OF PREPARATION THEREFOR	Hong; Kug Sun | Lee; Jung-Kun | Kim; Dong-Wan | Jung; Hyun-Seok | Hong; Hee-Bum | Lee; Jae-Yun | Yoon; Soung-Jun		6316376	C04B-035/499
5	2001-765577	2001-01-22	DIELECTRIC CERAMIC COMPOSITION AND METHOD FOR MANUFACTURING THE SAME	Kug Sun Hong | Jung-Kun Lee | Dong-Wan Kim | Hyun-Woo Jung | Jeong-Ryeol Kim | Sang-Gu Kang | Do-Kyun Kwon		6528445	C04B-035/495
6	2001-945717	2001-09-05	DIELECTRIC CERAMIC COMPOSITION AND METHOD FOR MANUFACTURING MULTILAYERED COMPONENTS USING THE SAME	Dong-Wan Kim | Do-Kyun Kwon | Jong-Sung Park | Jin-Young Kim	2003-0004051	6620750	C04B-035/495
7	2002-273265	2002-10-18	ARTIFICIAL BONE GRAFT SUBSTITUTE USING CALCIUM PHOSPHATE COMPOUNDS AND METHOD OF MANUFACTURING THE SAME	Hyun Seung Yu | Kug Sun Hong | Choon Ki Lee | Dong Ho Lee | Sang Lim Lee | Bong Soon Chang | Su Jin Kim | Chang Kyun Lim	2003-0193106	7037867	C04B-035/447
8	2002-517269	2002-06-05	SIGNALS AND MOLECULAR SPECIES INVOLVED IN SENESCENCE	Ik-Soon Jang | Eui-Ju Yeo | Sang-Chul Park	2006-0099568	7482134	C12Q-001/50
9	2003-513408	2003-05-01	PROCESS FOR PREPARING THIAZOLE DERIVATIVE AND THE INTERMEDIATE COMPOUNDS FOR PREPARING THE SAME	Heonjoong Kang | Jungyeob Ham	2005-0176785	7241901	C07D-277/38
10	2003-648220	2003-08-27	SELF-FOAMED POROUS CERAMIC COMPOSITION AND METHOD FOR MAKING POROUS CERAMIC USING THE SAME	Hyun Seung Yu | Kug Sun Hong | Hwan Kim | Dong Ho Lee | Choon Ki Lee | Bong Soon Chang | Deug Joong Kim | Jun Hyuk Seo | Jae Hyup Lee | Ki Soo Park	2004-0053766	7169721	C03C-011/00
11	2003-660499	2003-09-12	ROOT-SPECIFIC EXPANSIN GENE REGULATING ROOT GROWTH AND OBSTACLE-TOUCHING STRESS RESISTANCE IN THE PLANT	Jong Seob Lee | Dong-Keun Lee | Ji Hoon Ahn | Sang-Kee Song | Yang Do Choi	2005-0246795	7217861	C12N-015/82
12	2003-722491	2003-11-28	PHOSPHATE-BASED CERAMIC COMPOSITIONS WITH LOW DIELECTRIC CONSTANT AND METHOD FOR MANUFACTURING DIELECTRIC SUBSTRATE USING THE SAME	Kug Sun Hong | Dong Wan Kim | Hyun Seung Yu | Hee Bum Hong | Jeong Ryeol Kim | In Sun Cho	2005-0056360	7138351	C04B-035/447
13	2004-554439	2004-04-24	PROCESS FOR PREPARING GUGGULSTERONES AND GUGGULSTEROL	Heonjoong Kang | Jungyeob Ham | Jungwook Chin	2007-0055072		C07J-007/00
14	2004-555824	2004-05-07	DNA FRAGMENT SPECIFIC TO CYTOPLASMIC MALE STERILE PEPPER AND USE THEREOF	Byung-Dong Kim | Dong-Hwan Kim | Jeong-Gu Kang	2007-0180582	7728194	C12N-015/29
15	2004-780703	2004-02-19	GENE CONTROLLING FLOWERING TIME OF PLANTS AND METHOD FOR MANIPULATING FLOWERING TIME OF PLANT USING THE SAME	Jong Seob Lee | Yun Hee Kim | Eun kyung Choi | So Yeon Yoo | Ji Hoon Ahn | Yang Do Choi	2005-0034194	7230164	C12N-015/82

No.	Application		Title of Invention	Inventors	Publication Number	Patent Number	Main IPC
	Number	Date					
16	2004-968116	2004-10-20	SOLID-SOLUTION POWDER, METHOD TO PREPARE THE SOLID-SOLUTION POWDER, CERMET POWDER INCLUDING THE SOLID-SOLUTION POWDER, METHOD TO PREPARE THE CERMET POWDER, CERMET USING THE CERMET POWDER AND METHOD TO PREPARE THE CERMET	Shinhoo Kang	2006-0216192	7651967	C04B-035/56
17	2004-978084	2004-10-28	METHOD FOR PREPARING COMPOSITE MICROPARTICLES	So won Sheen | Man Soo Choi	2006-0093544	7214363	C01G-023/07
18	2005-065035	2005-02-25	PROCESS FOR PREPARATION OF 2, 6-DIALKYLTETRALIN	Young Gyu Kim | Woon Ki Kim | Byung Hyun Kim | Jong Gil Lee	2006-0020153	7525001	C07C-002/68
19	2005-086037	2005-12-07	PLASTICIZER COMPOSITION CONTAINING CYCLODEXTRIN DERIVATIVES, FLEXIBLE PVC COMPOSITION WITH SUPPRESSION OF THE MIGRATION OF PLASTICIZER CONTAINING THE SAME, AND MANUFACTURING METHOD THEREOF	Seung-Yeop Kwak | Sung-Ho Kim | Seok-Bong Lee	2009-0281214	8008376	C08B-037/00
20	2005-163997	2005-11-07	METHOD FOR FORMING NANOSTRUCTURE HAVING HIGH ASPECT RATIO AND METHOD FOR FORMING NANOPATTERN USING THE SAME	Kahp-Yang Suh | Hoon-Eui Jeong	2008-0000871	7632417	C23F-001/00
21	2005-285381	2005-11-23	PROCESS FOR LARGE-SCALE PRODUCTION OF MONODISPERSE NANOPARTICLES	Taeg-Hwan Hyeon | Jong-Nam Park	2006-0133990	7811545	C01G-009/02
22	2005-573245	2005-09-26	PROCESS FOR PREPARING THE INTERMEDIATE COMPOUNDS FOR PPAR *A* LIGANDS	Heonjoong Kang | Jungyeob Ham	2008-0269516	7528276	C07C-229/00
23	2005-587312	2005-01-12	A NOVEL STAY-GREEN GENE AND METHOD FOR PREPARING STAY-GREEN TRANSGENIC PLANTS	Nam-Chon Paek	2007-0094744		C12N-015/82
24	2005-913822	2005-05-07	PROCESS FOR PREPARING LIGANDS OF PPARDELTA AND THE\ INTERMEDIATE COMPOUNDS FOR PREPARING THE SAME	Heon Joong Kang | Jung Yeob Ham	2009-0118516	7982050	C07D-277/26
25	2006-095893	2006-11-07	MULTIPOTENT ADULT STEM CELLS HAVING AN ABILITY OF OCT4 EXPRESSION DERIVED FROM UMBILICAL CORD BLOOD AND METHOD FOR PREPARING THE SAME	Kyung Sun Kang	2009-0305413		C12N-005/06
26	2006-301465	2006-05-19	PREANTRAL FOLLICLE DERIVED EMBRYONIC STEM CELLS	Jeong Mook Lim | Jae Yong Han | Hee Bal Kim | Seung Tae Lee | Jong Eun Ihm	2010-0285579		C12N-005/075
27	2006-329523	2006-01-10	MONOCLONAL ANTIBODIES TO MESENCHYMAL STEM CELLS	Yeong-Wook Song | Hyun-Jung Yoo | Sung-Soo Yoon | Seonyang Park | Weon-Seo Park | Dong-Jo Kim | Eun-Bong Lee	2007-0161050	7476540	C12N-005/00
28	2006-377493	2006-12-20	EMBRYONIC STEM CELL-LIKE CELLS	Jeong Mook Lim | Jae Yong Han | Hee Bal Kim | Seoung Tae Lee | Eun Ju Lee | Seung Pyo Gong	2010-0227396		C12N-005/02
29	2006-414347	2006-05-01	THERMALLY STABLE LOW DIELECTRIC NORBORNENE POLYMERS WITH IMPROVED SOLUBILITY AND ADHESION PROPERTY	Jin Kyu Lee | Dong Woo Yoo | Seung Jae Yang | Kook Heon Char | Joo Hyeon Park	2007-0255031	7291689	C08F-232/08
30	2006-922341	2006-05-15	ENVIRONMENTAL STRESS RESISTANCE TRANSCRIPTION FACTOR AND METHOD FOR ENHANCING ENVIRONMENTAL STRESS RESISTANCE OF PLANTS USING THE SAME	Min-Kyun Kim | Jin-Wook Jung | So-Youn Won	2010-0186112	7982098	C12N-015/82

SECTION C
CHEMISTRY; METALLURGY

No.	Application		Title of Invention	Inventors	Publication Number	Patent Number	Main IPC
	Number	Date					
31	2007-305723	2007-06-20	CERAMIC AND CERMET HAVING THE SECOND PHASE TO IMPROVE TOUGHNESS VIA PHASE SEPARATION FROM COMPLETE SOLID-SOLUTION PHASE AND THE METHOD FOR PREPARING THEM	Shin Hoo Kang	2010-0273637		C04B-035/56
32	2007-308524	2007-06-21	TFLA GENE WHICH CAN DEGRADE TOXOFLAVIN AND ITS CHEMICAL DERIVATIVES AND TRANSGENIC ORGANISMS EXPRESSING TFLA GENE	In Gyu Hwang | Jae Sun Moon | Nam Soo Jwa	2010-0269215		C12N-015/82
33	2007-376058	2007-05-02	ANGIOGENESIS INHIBITOR COMPRISING METEORIN AS AN ACTIVE INGREDIENT	Kyu-Won Kim	2010-0048471	7960345	C07K-014/515
34	2007-376737	2007-08-08	MIXED POWDER AND SINTERED BODY, MIXED CERMET POWDER AND CERMET, AND FABRICATION METHODS THEREOF	Shin-Hoo Kang | Jin-Kwan Jung | Han-Jung Kwon	2010-0184582		C04B-035/56
35	2007-440304	2007-09-06	APPARATUS AND METHOD OF DEPOSITING FILMS USING BIAS AND CHARGING BEHAVIOR OF NANOPARTICLES FORMED DURING CHEMICAL VAPOR DEPOSITION	Nong-Moon Hwang | Chan-Soo Kim | Jae-Ik Lee | Yung-Bin Chung | Woong-Kyu Youn	2010-0183818		C23C-004/10
36	2007-442300	2007-09-21	CONDUCTIVE POLYMER-CARBON NANOTUBE COMPOSITE AND MANUFACTURING METHOD THEREOF	Yung-Woo Park | Johannes Steinmetz	2009-0242850	8110170	C01B-031/00
37	2007-446905	2007-10-24	CLEAVAGE AGENT SELECTIVELY ACTING ON SOLUBLE ASSEMBLY OF AMYLOIDOGENIC PEPTIDE OR PROTEIN	Jung Hun Suh	2010-0036122		C07D-251/12
38	2007-521498	2007-12-27	DATA PROCESSING, ANALYSIS METHOD OF GENE EXPRESSION DATA TO IDENTIFY ENDOGENOUS REFERENCE GENES	Young Kee Shin | Mi Jeong Kwon | En Sel Oh | Yong Ho In | Sang Seok Koh	2010-0137149		C40B-030/02
39	2007-532267	2007-03-30	DNP63A GENE AND SCREENING METHODS OF ANTICANCER AGENT BY USING IT	Hyun Sook Lee | Jung Hwa Lee	2010-0105045		C12Q-001/68
40	2007-625189	2007-01-19	NEURONAL REGENERATION MATERIAL SCREENING METHOD BY EX VIVO MODEL	Mi-Sook Chang	2008-0175821	7947435	C12Q-001/00
41	2007-680938	2007-10-01	VARIOUS HUMAN DENTAL STEM CELLS HAVING A MINERALIZATION ABILITY AND THE METHOD FOR CULTURING THEM	Pill-Hoon Choung	2010-0285582		C12N-005/02
42	2007-989630	2007-05-23	MANUFACTURING METHOD OF ORGANIC MODIFER-FREE EXFOLIATED NANO CLAY-POLYMER COMPOSITE	Seung-Yeop Kwak | Se-Bum Son | Sang-Wook Chun	2010-0093912	7884152	C08K-003/34
43	2007-989798	2007-05-23	POLY(VINYL CHLORIDE) PRODUCT CONTAINING CYCLODEXTRIN DERIVATIVES WITH SUPPRESSION OF THE MIGRATION OF PLASTICIZER AND MANUFACTURING METHOD THEREOF	Seung-Yeop Kwak | Sang-Jae Jung | Jae-Woo Chung	2009-0286908	8008375	C08B-037/00
44	2008-192003	2008-08-14	DEVICE FOR POSITIONING NANO MATERIALS	Youngtack SHIM	2010-0037819		C23C-016/54
45	2008-194361	2008-08-19	CARBON NANOTUBE SHEET	Yong Hyup Kim | Eui Yun Jang	2010-0044215	8137521	C25D-013/12
46	2008-196092	2008-08-21	CATALYST PARTICLES ON A TIP	Yong Hyup Kim | Wal Jun Kim	2010-0048391	8070929	C25D-005/00

No.	Application		Title of Invention	Inventors	Publication Number	Patent Number	Main IPC
	Number	Date					
47	2008-196148	2008-08-21	VERTICALLY STANDING IONIC POLYMER-METAL COMPOSITE	Yong Hyup Kim | Seong Jun Kim	2010-0044212		C25D-021/12
48	2008-199358	2008-08-27	MAGNETIC NANOPARTICLE COMPLEX	Jin-Kyu Lee	2010-0051510	8157986	C10G-017/00
49	2008-517567	2008-11-19	METHODS FOR IMPROVEMENT OF BIRTH RATES IN CANIDAE ON SOMATIC CELL NUCLEAR TRANSFER	Byeong Chun Lee | Min Kyu Kim | Goo Jang | Hyun Ju Oh | So Gun Hong | Jung Eun Park | Jung Taek Kang	2010-0293626		C12N-015/06
50	2008-681027	2008-10-02	COMPLEX OF CELL TRANSLOCATIONAL PEPTIDE AND MAGNETIC NANOPARTICLES AND USE THEREOF	Yoon-Jeong Park | Chong-Pyoung Chung | Victor C. Yang | Jin Sook Suh	2010-0298536		C07K-001/13
51	2008-682730	2008-10-15	METHOD OF SCREENING FOR RAGE-AMYLOID-BETA PEPTIDE INTERACTION INHIBITING MATERIALS	Inhee Mook-Jung | Sungmin Son	2010-0267031		C12Q-001/68
52	2008-733330	2008-08-28	BIOMAKER COMPOSITION FOR DETECTING DIABETIC RETINOPATHY AND DIAGNOSTIC KIT THEREFOR	Young-Soo Kim | Hyeong-Gon Yu | Kyung-Gon Kim | Sang-Jin Kim | Tae-Oh Kim	2010-0179307		C07K-016/00
53	2008-745810	2008-12-26	SOLID-SOLUTION CARBIDE / CARBONITRIDE POWDER AND METHOD FOR PREPARING THEREOF	Shinhoo Kang	2010-0273638		C04B-035/56
54	2008-745822	2008-12-26	SOLID-SOLUTION CARBIDE / CARBONITRIDE POWDER AND METHOD FOR PREPARING THEREOF UNDER HIGH TEMPERATURE	Shinhoo Kang	2010-0267542		C04B-035/56
55	2009-057401	2009-07-30	PHARMACEUTICAL COMPOSITION CONTAINING 1,2-DITHIOLTHIONE DERIVATIVE FOR PREVENTING OR TREATING DISEASE CAUSED BY OVEREXPRESSION OF LXR-ALPHA	Sang Geon Kim | Sung Hwan Ki | Seong Hwan Hwang	2011-0152524		C07D-409/04
56	2009-122055	2009-11-23	AMPHIPHILIC PEPTIDES PROMOTING PRODUCTION OF TARGET MIRNA AND METHOD OF REGULATING PRODUCTION OF TARGET MIRNA	Jaehoon Yu | Vic Narry Kim | Soonsil Hyun	2011-0230367		C40B-030/04
57	2009-540246	2009-08-12	PROCESS FOR SCREENING OF A BINDING AMPHIPHILIC PEPTIDES SPECIFIC FOR HAIRPIN RNA	Jaehoon Yu | Jeffrey Kieft | Su Jin Lee	2010-0173796	8084399	C40B-030/04
58	2009-596087	2009-10-15	METHOD FOR PROCESSING PORCINE CORNEA FOR DECELLULARIZATION	Won-Ryang Wee | Mee-Kum Kim | Joo-Youn Oh	2011-0183404		C07G-015/00
59	2009-607793	2009-10-28	METHOD FOR SURFACE MODIFICATION OF POLYMERIC SCAFFOLD FOR STEM CELL TRANSPLANTATION USING DECELLULARIZED EXTRACELLULAR MATRIX	Kwi Deok Park | Hee Joong Kim | Dong Keun Han | Yu Jin Hong | Heung Jae Chun | Ju Woong Jang	2010-0267143		C12N-005/071
60	2009-617122	2009-11-12	SINTERED MATERIAL FOR DIELECTRIC SUBSTANCE AND PROCESS FOR PREPARING THE SAME	Sang-Im YOO | Young-Mi KIM | Geo-Myung SHIN | Sung-Yun LEE	2010-0317502		C03C-014/00
61	2009-865979	2009-02-04	POTASSIUM ORGANOTRIFLUOROBORATE DERIVATIVE AND A PRODUCTION METHOD THEREFOR	Heonjoong Kang | Jungyeob Ham | Hong Ryul Ahn | Young Hee Park	2011-0004023		C07F-005/02
62	2009-918141	2009-02-18	MULTIPOTENT CANCER STEM CELL LINES AND METHOD FOR PRODUCING THE SAME	Dong-Young Noh | Won-shik Han | Eunyoung Ko | Jong Bin Kim | Kyung-Min Lee	2011-0053263		C12N-005/095

No.	Application		Title of Invention	Inventors	Publication Number	Patent Number	Main IPC
	Number	Date					
63	2009-936856	2009-03-31	NOVEL PLATENSIMYCIN DERIVATIVES, THEIR INTERMEDIATES, AND PROCESS FOR PREPARING THE SAME, AND NEW PROCESS FOR PREPARING PLATENSIMYCIN	Eun Lee | Ki Po Jang | Chan Hyuk Kim | Seong Wook Na | Dong Seok Jang	2011-0028741		C07D-311/78
64	2010-055708	2010-10-06	COMPOSITIONS FOR INDUCING DIFFERENTIATION INTO RETINAL CELLS FROM RETINAL PROGENITOR CELLS OR INDUCING PROLIFERATION OF RETINAL CELLS COMPRISING WNT SIGNALING PATHWAY ACTIVATORS	Sung Sup Park | Ji Yeon Kim	2011-0223660		C12N-005/071
65	2010-120331	2010-09-17	METHOD FOR PRODUCING INDUCED PLURIPOTENT STEM CELLS WITH HIGH EFFICIENCY AND INDUCED POLURIPOTENT STEM CELLS PROUCED THEREBY	Young-Bae Park | Hyo-Soo Kim | Yoo-Wook Kwon | Hyun-Jai Cho | Jae-Seung Paek	2011-0256626		C12N-005/071
66	2010-143676	2010-01-08	ANTI-CANCER DRUG SCREENING METHOD USING ROR-ALPHA	Keun Il Kim | Ji Min Lee | Sung Hee Baek	2011-0294130		C12Q-001/68
67	2010-257961	2010-03-03	ISOLATING METHOD FOR UMBILICAL CORD BLOOD-DERIVED PLURIPOTENT STEM CELLS EXPRESSING ZNF281	Kyung Sun Kang | Kyoung Hwan Roh	2012-0021509		C12N-005/0789
68	2010-262043	2010-03-31	HETEROCYCLE-AMINO ACID DERIVATIVES FOR TARGETING CANCER TISSUE AND RADIOACTIVE OR NON-RADIOACTIVE LABELED COMPOUNDS THEREOF	Jae Min Jeong | Dinesh Shetty | Dong Soo Lee | June Key Chung | Myung Chul Lee	2012-0029177		C07D-255/02
69	2010-815837	2010-06-15	METHOD FOR PRODUCING ETHANOL FROM XYLOSE USING RECOMBINANT SACCHAROMYCES CEREVISIAE INVOLVING COUPLED USE OF NADH AND NAD^+	Jin-Ho Seo | Yong-Cheol Park	2011-0143409		C12P-007/06
70	2010-852774	2010-08-09	MAGNETIC NANOCOMPOSITE, AND PROCESS FOR SELECTIVE BINDING, SEPARATION AND PURIFICATION OF PROTEIN USING THE SAME	Taeghwan Hyeon | Jae-Yoon Kim | Nohyun Lee | Yuanzhe Piao	2011-0098453		C07K-001/14
71	2010-876520	2010-09-07	FLUORESCENT DYE-LABELED GLUCOSE BIOPROBE, SYNTHESIS METHOD AND USAGE THEREOF	Seung Bum PARK | Hyang Yeon LEE | Jong Min PARK	2011-0059477		C12Q-001/02
72	2010-972315	2010-12-17	COMPOSITION FOR DIAGNOSING PARKINSON'S DISEASE CONTAINING ADIPOSE TISSUE-DERIVED MESENCHYMAL STROMAL CELL	Sun Ha Paek | Hyo Eun Moon | Hyung Woo Park | Hye Young Shin	2011-0311984		C12Q-001/68
73	2010-981727	2010-12-30	METHOD OF MANUFACTURING SILICA NANOWIRES	Sanghyun Park | Jaeyeong Heo | Hyeong Joon Kim	2011-0159286		C01B-033/12
74	2011-027629	2011-02-15	CONVERSION TO BIOENERGY FROM BIOMASS OF PROTISTAN GRAZERS FEEDING ON AQUATIC PLANT AND/OR ALGAE WHICH CAN SURVIVE AND UPTAKE GREENHOUSE GASES IN THE MIXTURE OF TOXIC GASES AND SUBSTANCE	Hae-Jin Jeong | Jae-Yeon Park | Yoeng-Do Yoo | Nam-Seon Kang | Jung-Rhe Rho	2011-0201064		C12P-007/64
75	2011-064222	2011-03-11	METHODS OF FABRICATING POLYCRYSTALLINE CERAMIC FOR THERMOELECTRIC DEVICES	Chan Park | Wook Jo | Jin-Sang Kim | O-Jong Kwon	2012-0068389		C04B-035/645
76	2011-078361	2011-04-01	PROCESS FOR PREPARING LIGANDS OF PPARDELTA AND THE INTERMEDIATE COMPOUNDS FOR PREPARING THE SAME	Heon Joong Kang | Jung Yeob Ham	2011-0184186		C07D-277/26

SECTION C
CHEMISTRY; METALLURGY

No.	Application		Title of Invention	Inventors	Publication Number	Patent Number	Main IPC
	Number	Date					
77	2011-089130	2011-04-18	DEVICE AND METHOD OF 3-DIMENSIONALLY GENERATING IN VITRO BLOOD VESSELS	Noo Li JEON | Ju Hun YEON | Qing Ping HU | Su Dong KIM | Hyun Jae LEE	2011-0244567		C12N-005/071
78	2011-198990	2011-08-05	NOVEL DIAGNOSTIC MARKER FOR TYPE 1 DIABETES MELLITUS	Sang Gyu Park | Kyong Soo Park | Sunghoon Kim	2012-0015383		C12Q-001/25
79	2011-271656	2011-10-12	COLOR ENCODED MAGNETIC STRUCTURE	Sunghoon KWON | Howon Lee | Junhoi Kim | Hyoki Kim	2012-0028834		C40B-030/04

SECTION D
TEXTILES; PAPER

No.	Application		Title of Invention	Inventors	Publication Number	Patent Number	Main IPC
	Number	Date					
1	2008-192024	2008-08-14	ENHANCED CARBON NANOTUBE	Yong Hyup Kim | Eui Yun Jang	2010-0040529		D01F-009/12
2	2008-198815	2008-08-26	MANUFACTURING CARBON NANOTUBE PAPER	Yong Hyup Kim | Eui Yun Jang	2010-0055023	8021640	D01F-009/12
3	2008-668930	2008-07-30	ELECTRICALLY CONDUCTIVE METAL COMPOSITE EMBROIDERY YARN AND EMBROIDERED CIRCUIT USING THEREOF	Tae-Jin Kang | Byung Duck Kim | Young Seung Chi | Jung Sim Roh	2010-0199901		D05C-017/00

SECTION E
FIXED CONSTRUCTIONS

No.	Application		Title of Invention	Inventors	Publication Number	Patent Number	Main IPC
	Number	Date					
1	2001-828726	2001-04-09	SEISMIC LOAD TRANSMITTING SYSTEM BASED ON IMPACT MECHANISM FOR MULTI-SPAN CONTINUOUS BRIDGES	Jae Kwan Kim | Ick Hyun Kim	2001-0029711	6499170	E04H-009/02
2	2001-894506	2001-06-28	DIRECTIONAL SLIDING PENDULUM SEISMIC ISOLATION SYSTEMS AND ARTICULATED SLIDING ASSEMBLIES THEREFOR	Jae Kwan Kim	2002-0166301	6631593	E04B-001/00
3	2002-096220	2002-03-11	DIRECTIONAL ROLLING PENDULUM SEISMIC ISOLATION SYSTEMS AND ROLLER ASSEMBLY THEREFOR	Jae Kwan Kim	2002-0166296	6725612	E04B-001/98
4	2003-625941	2003-07-24	DIRECTIONAL SLIDING PENDULUM SEISMIC ISOLATION SYSTEMS WITH ARTICULATED SLIDING ASSEMBLY	Jae Kwan Kim	2005-0172570	6951083	E04B-001/00
5	2003-639200	2003-08-12	DIRECTIONAL SLIDING PENDULUM SEISMIC ISOLATION SYSTEMS AND ARTICULATED SLIDING ASSEMBLIES THEREFOR	Jae Kwan Kim	2004-0045236	6862849	E04B-001/00
6	2004-791423	2004-03-02	VIBRATION CONTROL APPARATUS USING WATER TANK LOCATED AT TOP FLOOR OF A TALL BUILDING	Young Ju Kyu | Sung Yoon Won | Dae Kim Kon	2005-0050809	7290374	E04H-009/02

SECTION F
MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING

No.	Application		Title of Invention	Inventors	Publication Number	Patent Number	Main IPC
	Number	Date					
1	1999-291041	1999-04-14	SMALL-SCALE BOILER SYSTEM USING SCRAPPED TIRES	Joo; Seungki | Yoon; Doyoung | Park; Changwon | Kim; Yongchurl		6294135	F23G-005/00
2	2003-607276	2003-06-27	MICRO CHANNEL UNIT	Seokhyun Lim | Haecheon Choi	2004-0035481	6866067	F15D-001/00
3	2009-140630	2009-02-20	DISPLAYABLE WIND TURBINE	Seung Jo Kim	2011-0305569		F03D-011/00

SECTION G
PHYSICS

No.	Application		Title of Invention	Inventors	Publication Number	Patent Number	Main IPC
	Number	Date					
1	1998-223108	1998-12-30	ENERGY RECOVERY DRIVER CIRCUIT FOR AC PLASMA DISPLAY PANEL	Ki Woong Whang | Jin Ho Yang		6538627	G09G-003/28
2	1999-202982	1999-01-26	GAP STRUCTURE FOR NUCLEAR REACTOR VESSEL	Hwang; Il Soon | Suh; Kune Yull | Jeong; Kwang Jin | Park; Sang Deok | Lim; Dong Cheol		6195405	G21C-009/00
3	2000-600160	2000-08-01	APPARATUS AND METHOD FOR AUTOMATICALLY DISPLAYING INFORMATION	Myun Woo Lee | Chang Kyu Cho | Jae Young Kim | Tae Sin Ha		6693627	G09G-005/00
4	2000-623228	2000-08-30	FORMATION METHOD AND DEVICE FOR CURVED PLATES	Jong Gye Shin | Won Don Kim		6560498	G06F-019/00
5	2001-415763	2001-08-01	DIAGNOSTIC AGENTS FOR THE PRENATAL DIAGNOSIS OF PRETERM DELIVERY, FETAL INFECTION, AND FETAL DAMAGE, AND DIAGNOSTIC KIT CONTAINING THE SAME	Bo Hyun Yoon	2004-0029176	7232661	G01N-033/53
6	2001-494814	2001-11-10	SURFACE PLASMON OPTIC DEVICES AND RADIATING SURFACE PLASMON SOURCES FOR PHOTOLITHOGRAPHY	Dai-Sik Kim | Sung-Chul Hohng | Christoph Lienau | Victor Malyarchuck | Jong-Wan Park | Yeo-Chan Yoon | Han-Youl Ryu | Kyeong-Hwa Yoo	2005-0062973	7359598	G02B-006/26
7	2001-817128	2001-03-27	AC PLASMA DISPLAY PANEL	Ki Woong Whang | Cha Keun Yoon	2002-0047558	6373195	G09G-003/10
8	2002-230861	2002-08-28	THREE-DIMENSIONAL IMAGE DISPLAY	Byoungho Lee | Jae-Hyeung Park | Sung-Yong Jung | Sung-Wook Min	2003-0052876	7091992	G06T-015/00
9	2002-313752	2002-12-05	METHOD FOR EXAMINING STRUCTURES HAVING HIGH NATURAL VIBRATION FREQUENCY USING ALTERNATING MANUAL VIBRATION-EXCITING METHOD	Sung Won Yoon | Sang Keun Oh	2004-0111223	6757620	G01B-003/00
10	2003-449043	2003-05-29	METHODS AND APPARATUS FOR MEASURING FLEXURAL WAVE AND/OR FLEXURAL VIBRATION USING A MAGNETOSTRICTIVE SENSOR	Yoon Young Kim | Seung Hyun Cho | Young Kyu Kim | Woo Chul Kim	2004-0089072	6868730	G01N-029/24
11	2003-450978	2003-06-18	REFLECTING THREE-DIMENSIONAL DISPLAY SYSTEM	Byoungho Lee | Yoonchan Jeong | Sung-Wook Min | Sungyong Jung | Jae-Hyeung Park	2004-0061934	7136031	G03B-021/56
12	2003-510749	2003-04-12	METHOD FOR DISCRIMINATING ORGANIC AGRICULTURAL PRODUCTS FROM CONVENTIONAL AGRICULTURAL PRODUCTS BY USING NITROGEN ISOTOPE INDEX	Hee Ro Myong | Woo Choi Jung	2005-0158871	7670842	G01N-024/00
13	2003-603731	2003-06-25	METHOD AND APPARATUS FOR EXAMINING PLASMA DISPLAY PANEL ELECTRODES USING FREQUENCY CHARACTERISTICS	Jae Hong Park | Han Sang Lim	2004-0090222	6870371	G01R-001/00
14	2003-727148	2003-12-03	METHOD OF DRIVING PLASMA DISPLAY PANEL	Ki-Woong Whang | Jin-Ho Yang | Woo-Joon Jung	2005-0057443	7151510	G09G-003/28
15	2004-002230	2004-12-03	APPARATUS FOR GENERATING AND MEASURING BENDING VIBRATION IN A NON-FERROMAGNETIC PIPE WITHOUT PHYSICAL CONTACT	Yoon Young Kim | Soon Woo Han | Chan Park, Il	2005-0223801	7140254	G01N-024/12
16	2004-758780	2004-01-15	AC TYPE FLOWMETER AND METHOD OF MAPPING FLOW RATE DATA FOR THE SAME	Ohmyoung Kwon | Joon Sik Lee | Young Ki Choi | Seungho Park | Won Seok Chung	2005-0044950	7007549	G01F-001/68

SECTION G
PHYSICS

No.	Application		Title of Invention	Inventors	Publication Number	Patent Number	Main IPC
	Number	Date					
17	2004-958269	2004-10-06	MAGNETORESTRICTIVE TRANSDUCER FOR GENERATING AND MEASURING ELASTIC WAVES, AND APPARATUS FOR STRUCTURAL DIAGNOSIS USING THE SAME	Seung Hyun Cho | Kyung Ho Sun | Ju Seung Lee | Yoon Young Kim		6924642	G01N-027/82
18	2004-958590	2004-10-06	TRANSDUCER FOR GENERATING AND MEASURING TORSIONAL WAVES, AND APPARATUS AND METHOD FOR STRUCTURAL DIAGNOSIS USING THE SAME	Chan Il Park | Seung Hyun Cho | Soon Woo Han | Yoon Young Kim	2005-0179430	7215118	G01N-027/82
19	2004-981685	2004-11-05	LINEAR DISPLACEMENT TRANSDUCER WITH IMPROVED ACCURACY	Eun Jong Cha | Kyung Ah Kim | Tae Soo Lee		6956384	G01R-027/08
20	2005-060656	2005-02-18	CHARGE PUMP CIRCUIT WITH NO OUTPUT VOLTAGE LOSS	Young-June Park | Jong-Shin Shin	2005-0264342	7292089	G05F-003/02
21	2005-092976	2005-03-30	MAGNETOSTRICTIVE TRANSDUCER USING TAILED PATCHES AND APPARATUS FOR MEASURING ELASTIC WAVE USING THE MAGNETOSTRICTIVE TRANSDUCER	Yoon-young Kim | Chan-il Park | Seung-hyun Cho | Woo-chul Kim	2006-0145692	7295001	G01B-007/24
22	2005-094392	2005-03-30	METHOD AND SYSTEM FOR GRAPHICAL HAIRSTYLE GENERATION USING STATISTICAL WISP MODEL AND PSEUDOPHYSICAL APPROACHES	Byoungwon Choe | Hyeong-Seok Ko	2006-0224366	7418371	G06F-007/60
23	2005-318158	2005-12-23	METHOD AND SYSTEM OF REAL-TIME GRAPHICAL SIMULATION OF LARGE ROTATIONAL DEFORMATION AND MANIPULATION USING MODAL WARPING	Min Gyu Choi | Hyeong Seok Ko	2006-0139347	7493243	G06F-017/10
24	2005-318171	2005-12-23	METHOD FOR SIMULATING STABLE BUT NON-DISSIPATIVE WATER	Oh-Young Song | Hyuncheol Shin | Hyeong-Seok Ko	2007-0043544	7647214	G06F-017/50
25	2005-555590	2005-07-08	PEPTIDE AND A DERIVATIVE THEREOF PROMOTING CELL ADHESION AND SPREADING	Byung-Moo Min | Jin-Man Kim	2008-0096792	7517654	G01N-033/53
26	2005-667600	2005-11-11	METHOD FOR ALIGNING OR ASSEMBLING NANO-STRUCTURE ON SOLID SURFACE	Seung-Hun Hong | Min-Baek Lee | Ji-Woon Im	2008-0044775		G03F-007/00
27	2006-064060	2006-09-28	METHOD OF GENERATING STRONG SPIN WAVES AND SPIN DEVICES FOR ULTRA-HIGH SPEED INFORMATION PROCESSING USING SPIN WAVES	Sang-Koog Kim | Ki-Suk Lee | Sang-Kook Choi	2008-0231392	8164148	G11B-005/66
28	2006-308505	2006-09-29	SURFACE ENHANCED RAMAN SCATTERING NANO-TAGGING PARTICLE AND METHOD FOR PREPARING THEREOF	Yoon-Sik Lee | Dae-Hong Jeong | Jong-Ho Kim | Hee-Jeong Choi | Sang-Myung Lee	2010-0321683	7982870	G01J-003/44
29	2006-351134	2006-02-09	PICTURE ELEMENT STRUCTURE OF CURRENT PROGRAMMING METHOD TYPE ACTIVE MATRIX ORGANIC EMITTING DIODE DISPLAY AND DRIVING METHOD OF DATA LINE	Min-Koo Han | Jae-Hoon Lee | Woo-Jin Nam	2006-0145989		G09G-003/36
30	2006-398982	2006-04-05	METHOD OF SIMULATING DETAILED MOVEMENTS OF FLUIDS USING DERIVATIVE PARTICLES	Oh-Young Song | Doyub Kim | Hyeong-Seok Ko	2007-0239414	7565276	G06F-017/50
31	2006-398987	2006-04-05	METHOD FOR GENERATING INTUITIVE QUASI-EIGEN FACES	Ig-Jae Kim | Hyeong-Seok Ko	2007-0236501	7535472	G06T-013/00

No.	Application		Title of Invention	Inventors	Publication Number	Patent Number	Main IPC
	Number	Date					
32	2006-412525	2006-04-27	PIXEL STRUCTURE USING VOLTAGE PROGRAMMING-TYPE FOR ACTIVE MATRIX ORGANIC LIGHT EMITTING DEVICE	Min-Koo Han | Jae-Hoon Lee	2006-0256057	7872620	G09G-003/32
33	2006-432145	2006-05-11	PLATE TYPE CAPACITIVE SENSOR FOR FIVE-DIMENSIONAL DISPLACEMENT MEASUREMENT	Hyeong-Joon Ahn | Chi-Hyoung Shim | Dong-Chul Han	2007-0261258	7302762	G01B-007/14
34	2006-443196	2006-05-31	APPARATUS AND METHOD FOR GENERATING AND SENSING TORSIONAL VIBRATIONS USING MAGNETOSTRICTION	Yoon Young Kim | Seung Hyun Cho | Soon Woo Han | Chan Il Park	2007-0113684	7621189	G01L-003/00
35	2006-491961	2006-07-25	TERAHERTZ OR INFRARED FILTER USING SHAPE RESONANCE	Dae-Sik Kim | Sae Chae Jeoung | Joong Wook Lee | Min Ah Seo	2007-0165295	7746550	G06K-007/10
36	2006-516192	2006-12-18	PHOTONIC MEMORY DEVICE, DATA STORING METHOD USING THE PHOTONIC MEMORY DEVICE AND PHOTONIC SENSOR DEVICE	Byung-Youn Song | Jung-Hoon Lee	2010-0061138	7903445	G11C-013/00
37	2006-524326	2006-09-21	METHOD OF GENERATING AND MEASURING TORSIONAL WAVES IN CYLINDRICAL STRUCTURE USING MAGNETOSTRICTIVE EFFECT, AND MAGNETOSTRICTIVE TRANSDUCER AND STRUCTURE DIAGNOSIS APPARATUS USING THE METHOD	Yoon-Young Kim | Seung-Hyun Cho | Ik-Kyu Kim | Chan-Il Park	2007-0090904	7614313	G01L-003/02
38	2007-311829	2007-07-24	METHOD AND SYSTEM FOR SIMULATING CHARACTER	Jehee Lee | Manmyung Kim | Kwang Won Sok	2010-0277483		G06T-015/70
39	2007-441380	2007-10-05	MAGNETOELECTRIC SUSCEPTIBILITY MEASUREMENT METHOD AND THE SYSTEM THEREOF	Kee hoon Kim | Yoon seok Oh	2009-0270262		G01R-033/035
40	2007-442109	2007-08-30	SIMULTANEOUS DETECTION APPARATUS OF RAMAN AND LIGHT SCATTERING	Dae-Hong Jeong | Yoon-Sik Lee | Myung-Haing Cho | Yong-Kweon Kim	2010-0020312	8018582	G01J-003/44
41	2007-532913	2007-12-21	FLUORESCENT DYE-LABELED GLUCOSE BIOPROBE, SYNTHESIS METHOD AND USAGE THEREOF	Seung Bum Park | Myung Haing Cho | Hyang Yeon Lee | Jong Min Park	2010-0105149		G01N-021/76
42	2007-825769	2007-07-09	ORGANIC LIGHT EMITTING DISPLAY	Min Koo Han | Hyun Sang Park | Jae Hoon Lee	2008-0018655		G09G-005/36
43	2007-851730	2007-09-07	METHOD OF BEAT TUNING IN A SLIGHTLY ASYMMETRIC RING-TYPE STRUCTURE	Yeon June Kang | Han Gil Park | Seock Hyun Kim | Jang Moo Lee	2009-0049913		G01H-001/06
44	2007-859251	2007-09-21	METHOD FOR ESTIMATING OPTIMIZED TRANSMISSION BIT RATE IN WIRELESS LOCAL AREA NETWORK SYSTEM	Ji Hoon Yun | Seung Woo Seo	2008-0192815	7957286	G01R-031/08
45	2007-936961	2007-11-08	PARTICLE FOCUSING APPARATUS AND METHOD FOR FOCUSING PARTICLES BY USING THE SAME	Jung Yul Yoo | Young Won Kim	2009-0038942	8142631	G05D-007/03
46	2007-947612	2007-11-29	METHODS OF SCREENING FOR COMPOUNDS THAT INHIBIT BINDING BETWEEN AMYLOID-β(Aβ) AND FC-γ RECEPTOR IIB (FCγRIIB)	Yong-Keun Jung | Sungmin Song	2009-0123459	8124358	G01N-033/567
47	2007-995916	2007-08-06	NANOSTRUCTURE SENSORS	Young June Park | Jun Ho Cheon | Sung Min Seo	2010-0109645	8072226	G01R-031/02

No.	Application		Title of Invention	Inventors	Publication Number	Patent Number	Main IPC
	Number	Date					
48	2008-123895	2008-05-20	FLAT PANEL DISPLAY	Min Koo Han | Huyn Sang Park	2008-0291351		G02F-001/133
49	2008-133931	2008-06-05	METHOD AND SYSTEM OF DETECTING ACCOUNT SHARING BASED ON BEHAVIOR PATTERNS	Sungzoon Cho | Seong Seob Hwang	2009-0049555		G06F-021/00
50	2008-168204	2008-07-07	ORGANIC LIGHT EMITTING DISPLAY	Min Koo Han | San Myeon Han	2009-0027312	8149187	G09G-003/30
51	2008-195356	2008-08-20	TRANSPARENT CONDUCTIVE FILMS	Seunghun Hong | Moon Gyu Sung	2010-0045610		G06F-003/041
52	2008-196194	2008-08-21	ALIGNED NANOSTRUCTURES ON A TIP	Yong Hyup Kim | Wal Jun Kim	2010-0047621	7917966	G01Q-070/12
53	2008-196808	2008-08-22	SILICA-BASED FLUORESCENT NANOPARTICLES	Jin-Kyu Lee	2010-0047859		G01N-001/30
54	2008-198720	2008-08-26	METHOD AND SYSTEM FOR 3D LIP-SYNCH GENERATION WITH DATA-FAITHFUL MACHINE LEARNING	Ig-Jae Kim | Hyeong-Seok Ko	2010-0057455		G10L-015/26
55	2008-199733	2008-08-27	NANOSTRUCTURE ON A PROBE TIP	Yong Hyup Kim | Tae June Kang	2010-0058500	7814565	G21K-007/00
56	2008-210991	2008-09-15	MANUFACTURING A GRAPHENE DEVICE AND A GRAPHENE NANOSTRUCTURE SOLUTION	Seunghun Hong | Juntae Koh	2010-0035186		G03F-007/20
57	2008-292427	2008-11-19	ONE-TRANSISTOR FLOATING-BODY DRAM CELL DEVICE WITH NON-VOLATILE FUNCTION	Jong-Ho Lee	2009-0147580	8144514	G11C-011/34
58	2008-323372	2008-11-25	NANOSTRUCTURE FABRICATION	Sunghoon Kwon	2010-0055620		G03F-007/20
59	2008-443802	2008-09-22	METHOD OF DETECTING CHARACTER STRING PATTERN AT HIGH SPEED USING LAYERED SHIFT TABLES	Yoon Ho Choi | Seung Woo Seo	2011-0066631	8108387	G06F-007/00
60	2008-530367	2008-03-07	OPTICAL IDENTIFICATION TAG, READER AND SYSTEM	Sunghoon Kwon | Youngjune Park | Suhwan Kim	2010-0096447		G06F-017/00
61	2008-738655	2008-10-17	METHOD FOR RECORDING OF INFORMATION IN MAGNETIC RECORDING ELEMENT AND METHOD FOR RECORDING OF INFORMATION IN MAGNETIC RANDOM ACCESS MEMORY	Sang-Koog KIM | Ki-Suk LEE | Young-Sang YU	2010-0290281		G11C-011/14
62	2008-738657	2008-10-17	METHOD FOR READ-OUT OF INFORMATION IN MAGNETIC RECORDING ELEMENT AND METHOD FOR READ-OUT OF INFORMATION IN MAGNETIC RANDOM ACCESS MEMORY	Sang-Koog Kim | Ki-Suk Lee | Young-Sang Yu	2010-0271728	8094487	G11C-011/14
63	2008-933956	2008-04-04	CLOCK AND DATA RECOVERY CIRCUIT WITH ELIMINATING DATA-DEPENDENT JITTERS	Deog Kyoon Jeong | Jin-Hee Lee	2011-0022890		G06F-011/14
64	2009-058353	2009-06-08	RFID-BASED SYSTEM FOR LINKING ELECTRONIC MEDICAL RECORD	Myung-Whun Sung | Kwang-Suk Park | Chung-Hyeon Kim	2011-0191124		G06Q-050/00
65	2009-062275	2009-05-22	BIOMOLECULAR SENSOR WITH PLURAL METAL PLATES AND MANUFACTURING METHOD THEREOF	Yong Hyup Kim | Young June Park | Jung Woo Ko | Tae June Kang | Seok Hyang Kim | Jae Heung Lim	2011-0223065		G01N-027/00
66	2009-123511	2009-10-09	NOVEL APPLICATION OF AIMP1 POLYPEPTIDE	Sunghoon Kim | Jung-Min Han	2011-0250701		G01N-033/566

No.	Application		Title of Invention	Inventors	Publication Number	Patent Number	Main IPC
	Number	Date					
67	2009-361107	2009-01-28	NAND FLASH MEMORY ARRAY WITH CUT-OFF GATE LINE AND METHODS FOR OPERATING AND FABRICATING THE SAME	Byung-Gook Park | Seong Jae Cho	2009-0207667	7995390	G11C-016/04
68	2009-370077	2009-02-12	SYSTEM AND METHOD FOR STABILIZATION CONTROL ADOPTING VESTIBULO-OCULAR REFLEX	Dong-il Cho | Hyoungho Ko | Jaehong Park | Sangmin Lee	2010-0106295		G05B-019/04
69	2009-376781	2009-06-19	SYSTEM AND METHOD FOR MOTION EDITING MULTIPLE SYNCHRONIZED CHARACTERS	Jehee Lee | Manmyung Kim	2012-0075349		G06T-013/00
70	2009-397299	2009-03-03	RESISTANCE MEMORY ELEMENT, PHASE CHANGE MEMORY ELEMENT, RESISTANCE RANDOM ACCESS MEMORY DEVICE, INFORMATION READING METHOD THEREOF, PHASE CHANGE RANDOM ACCESS MEMORY DEVICE, AND INFORMATION READING METHOD THEREOF	Cheol-Seong Hwang | Tae-Joo Park	2010-0008132	8023318	G11C-011/00
71	2009-414978	2009-03-31	SEMI-LAGRANGIAN CIP FLUID SOLVER WITHOUT DIMENSIONAL SPLITTING	Doyub KIM | Oh-Young SONG | Hyeong-Seok KO	2010-0250213	8055490	G06G-007/48
72	2009-476617	2009-06-02	DEMAND RESPONSE METHOD AND SYSTEM	YongTae YOON	2009-0295594		G08B-005/22
73	2009-548637	2009-08-27	METHOD FOR WIRELESS MULTI-HOP NETWORK	Sae-Woong Bahk | Kyong-Tak Cho	2010-0290379	8169942	G08C-017/00
74	2009-555428	2009-09-08	OPTOFLUIDIC LITHOGRAPHY SYSTEM, METHOD OF MANUFACTURING TWO-LAYERED MICROFLUIDIC CHANNEL, AND METHOD OF MANUFACTURING THREE-DIMENSIONAL MICROSTRUCTURES	Sunghoon Kwon | SeungAh Lee | Wook Park | SuEun Chung	2010-0060875		G03B-027/54
75	2009-640602	2009-12-17	SEGMENTED MAGNETOSTRICTIVE PATCH ARRAY TRANSDUCER, APPARATUS FOR DIAGNOSING STRUCTURAL FAULT BY USING THE SAME, AND METHOD OF OPERATING THE SAME	Hoe Woong KIM | Young Eui KWON | Yoon Young KIM	2010-0259252		G01N-027/82
76	2009-937521	2009-01-13	STEERING METHOD FOR VEHICLE AND APPARATUS THEREOF	Hyoun Jin Kim | Yongsoon Yoon	2011-0035086		G06F-017/10
77	2009-989572	2009-04-22	PROCESS FOR RANKING SEMANTIC WEB RESORUCES	Sang-Kyu Rho | Hyun-Jung Park | Jin-Soo Park	2011-0040717		G06N-005/02
78	2009-991537	2009-05-07	NOVEL AU/AG CORE-SHELL COMPOSITE USEFUL FOR BIOSENSOR	Jwa-Min Nam | Dong-Kwon Lim | In-Jung Kim	2011-0124008		G01N-033/53
79	2009-991609	2009-05-07	OLFACTORY RECEPTOR-FUNCTIONALIZED TRANSISTORS FOR HIGHLY SELECTIVE BIOELECTRONIC NOSE AND BIOSENSOR USING THE SAME	Seung-Hun Hong | Tai Hyun Park | Tae-Hyun Kim | Sang Hun Lee	2011-0059544		G01N-027/00
80	2010-321925	2010-02-11	POSITIONING SYSTEM AND METHOD BASED ON RADIO COMMUNICATION APPARATUS COMPRISING MULTIPLE ANTENNA	Changdon Kee | Taikjin Lee	2012-0075145		G01S-003/46
81	2010-766638	2010-04-23	APPARATUS AND METHOD FOR MEASURING DEPTH-OF-INTERACTION USING LIGHT DISPERSION AND POSITRON EMISSION TOMOGRAPHY USING THE SAME	Jae Sung Lee | Mikiko Ito | Seong Jong Hong	2010-0270463		G12B-013/00

No.	Application		Title of Invention	Inventors	Publication Number	Patent Number	Main IPC
	Number	Date					
82	2010-791988	2010-06-02	SYSTEM AND METHOD FOR COMPENSATING FOR ANODE GAIN NON-UNIFORMITY IN MULTI-ANODE POSITION SENSITIVE PHOTOMULTIPLIER TUBE	Jae Sung Lee | Chan Mi Lee | Sun Il Kwon | Mikiko Ito | Hyun Suk Yoon | Sang Keun Park | Seong Jong Hong | Dong Soo Lee	2011-0192980		G01T-001/208
83	2010-816760	2010-06-16	MAGNETOSTRICTIVE TRANSDUCER AND APPARATUS AND METHOD FOR MONITORING STRUCTURAL HEALTH USING THE SAME	Ju Seung Lee | Min Kyung Lee | Heung Son Lee | Yoon Young Kim	2010-0321009		G01R-033/18
84	2010-817057	2010-06-16	VIRTUAL NETWORK EMBEDDING METHOD IN WIRELESS TEST-BED NETWORK	Keun Mo PARK | Chong Kwon Kim	2011-0004456		G06G-007/62
85	2010-817799	2010-06-17	APPARATUS AND METHOD FOR IMAGING SUBSURFACE STRUCTURE OF TARGET AREA BY USING WAVEFORM INVERSION	Chang-Soo SHIN	2010-0322032		G01V-001/36
86	2010-847872	2010-07-30	NON-CONTACT TYPE TRANSDUCER HAVING MULTI-LOOP COIL FOR PLATE MEMBER	Chan Il PARK | Sun Ho LEE | Yoon Young KIM	2011-0031966		G01N-027/90
87	2010-890278	2010-09-24	APPARATUS AND METHOD FOR SEISMIC IMAGING USING WAVEFORM INVERSION SOLVED BY CONJUGATE GRADIENT LEAST SQUARES METHOD	Changsoo SHIN	2011-0267923		G01V-001/50
88	2010-895159	2010-09-30	APPARATUS FOR NETWORK TRAFFIC CLASSIFICATION BENCHMARK	Su Chul LEE | Sung Ryoul Lee | Hyun Chul Kim | Chong Kwon Kim	2011-0093785		G06F-003/01
89	2010-946882	2010-11-16	FAULT DETECTOR AND FAULT DETECTION METHOD FOR ATTITUDE CONTROL SYSTEM OF SPACECRAFT	Chan Gook PARK | Jun Han LEE | Won Hee LEE	2012-0053780		G06F-019/00
90	2010-974350	2010-12-21	APPARATUS AND METHOD FOR IMAGING A SUBSURFACE USING ACCUMULATED ENERGY OF WAVEFIELD	Changsoo SHIN	2011-0194377		G01V-001/28
91	2011-033516	2011-02-23	SUBSURFACE IMAGING METHOD USING VIRTUAL SOURCES DISTRIBUTED UNIFORMLY OVER THE SUBSURFACE	Changsoo SHIN	2012-0026835		G01V-001/28
92	2011-039611	2011-03-03	FABRICATING METHOD OF MAGNETIC AXIS CONTROLLED STRUCTURE	Sunghoon KWON | Hyoki Kim | Junhoi Kim | Howon Lee	2011-0221431		G01R-033/02
93	2011-095295	2011-04-27	LED DISPLAY APPARATUS HAVING ACTIVE DEVICES AND FABRICATION METHOD THEREOF	Byung Gook Park | Chang Su Seo | Byung Doo Yoo | Keun Kee Hong | Sang Yeop Jee | Jae Min Jeong	2011-0273410		G09G-003/32
94	2011-160913	2011-06-15	APPARATUS AND METHOD FOR IMAGING A SUBSURFACE USING FREQUENCY-DOMAIN ELASTIC REVERSE-TIME MIGRATION	Changsoo SHIN	2012-0051182		G01V-001/28
95	2011-164462	2011-06-20	METHOD AND APPARATUS FOR TIME-DOMAIN REVERSE-TIME MIGRATION WITH SOURCE ESTIMATION	Changsoo SHIN	2012-0051179		G01V-001/36
96	2011-165185	2011-06-21	METHOD AND APPARATUS FOR FREQUENCY DOMAIN REVERSE-TIME MIGRATION WITH SOURCE ESTIMATION	Changsoo SHIN	2012-0051180		G01V-001/28

No.	Application		Title of Invention	Inventors	Publication Number	Patent Number	Main IPC
	Number	Date					
1	2001-018280	2001-12-14	MECHANICAL BEAM STEERING ANTENNA AND FABRICATING METHOD THEREOF	Young-Woo Kwon | Chang-Yul Cheon | Yong-Kweon Kim | Seung-Hyun Song | Chang-Wook Baek | Yang-Soo Lee	2003-0160722	6765534	H01Q-001/38
2	2001-841072	2001-04-25	PROCESS FOR FORMING ALUMINUM OR ALUMINUM OXIDE THIN FILM ON SUBSTRATES	Seung Ki Joo | Jang Sik Lee | Chang Wook Jeong	2002-0081394	6635571	H01L-021/44
3	2001-949477	2001-09-07	FIELD EMISSION EMITTER	Jisoon Ihm	2002-0076846	6770497	H01L-021/00
4	2002-160654	2002-06-03	VERTICAL CAVITY SURFACE EMITTING LASER	Heon-Su Jeon	2002-0181536	6661829	H01S-003/08
5	2002-209991	2002-07-31	3-DIMENSIONAL BEAM STEERING SYSTEM	Young-Woo Kwon | Chang-Yul Cheon	2003-0034916	6873289	H01Q-003/24
6	2002-220364	2002-08-29	APPARATUS AND A METHOD FOR FORMING A PATTERN USING A CRYSTAL STRUCTURE OF MATERIAL	Ki-Bum Kim	2003-0155523	6855481	H01L-021/335
7	2002-220365	2002-08-29	METHOD FOR FORMING A PATTERN AND A SEMICONDUCTOR DEVICE	Ki-Bum Kim	2003-0052342	6767771	H01L-031/0336
8	2003-457225	2003-06-09	PARALLEL SWITCHING ARCHITECTURE FOR MULTIPLE INPUT/OUTPUT	Hyoung-Il Lee | Seung Woo Seo	2004-0085979	7397808	H04L-012/56
9	2003-614666	2003-07-07	METHOD FOR FABRICATING SEMICONDUCTOR DEVICE WITH NEGATIVE DIFFERENTIAL CONDUCTANCE OR TRANSCONDUCTANCE	Byung Gook Park | Jong Duk Lee | Kyung Rok Kim	2004-0097023	6800511	H01L-021/84
10	2003-746358	2003-12-24	LOW-TEMPERATURE FORMATION METHOD FOR EMITTER TIP INCLUDING COPPER OXIDE NANOWIRE OR COPPER NANOWIRE AND DISPLAY DEVICE OR LIGHT SOURCE HAVING EMITTER TIP MANUFACTURED USING THE SAME	Ho-Young Lee | Yong-Hyup Kim | Woo Yong Sung	2004-0147049	7041518	H01L-021/00
11	2004-563854	2004-07-07	GROWTH METHOD FOR NITRIDE SEMICONDUCTOR EPITAXIAL LAYERS	Euijoon Yoon | Hyunseok Na	2006-0228901	7964483	H01L-021/20
12	2004-596126	2004-10-20	GROWTH METHOD OF NITRIDE SEMICONDUCTOR LAYER AND LIGHT EMITTING DEVICE USING THE GROWTH METHOD	Euijoon Yoon | Soon-Yong Kwon | Pilkyung Moon	2007-0075307	7977664	H01L-029/06
13	2004-709255	2004-04-23	METHOD OF SHARING STATE BETWEEN STATEFUL INSPECTION FIREWALLS ON MEP NETWORK	Jin-Ho Kim | Sae-Woong Bahk | Hee-Jo Lee	2005-0240989		H04L-009/00
14	2004-751860	2004-01-06	DOUBLE-GATE FLASH MEMORY DEVICE AND FABRICATION METHOD THEREOF	Jong Lee Ho	2005-0145926	7005700	H01L-029/788
15	2004-836588	2004-04-30	WIRELESS COMMUNICATION METHOD AND APPARATUS USING MULTIPLE ANTENNAS AND MULTIPLE RANDOM BEAMS	Yong-hwan Lee | Sung-su Hwang	2005-0181833	7437182	H04Q-007/20
16	2004-877025	2004-06-25	METHOD FOR ENCODING A MESSAGE INTO GEOMETRICALLY UNIFORM SPACE-TIME TRELLIS CODES	Jae Hong Lee | Young Seok Jung	2005-0005229	7526047	H04L-027/00
17	2004-926710	2004-08-26	MULTIPLE TRELLIS CODED DIFFERENTIAL UNITARY SPACE-TIME MODULATION	Jae Hong Lee | Soonsang Soh	2005-0147182	7433423	H04L-027/00

SECTION H
ELECTRICITY

No.	Application		Title of Invention	Inventors	Publication Number	Patent Number	Main IPC
	Number	Date					
18	2005-114508	2005-04-26	DECODING METHOD USING ADAPTIVE STEP-SIZE ALGORITHM FOR A SPACE-TIME CODED DS-CDMA SYSTEM	Jae Hong Lee | Joo Hyun Yi	2006-0078042	7492808	H04B-001/00
19	2005-234544	2005-09-23	METHOD FOR ENCODING A MESSAGE USING DIAGONALLY WEIGHTED SPACE-TIME TRELLIS CODE DEPENDING ON BIT FEEDBACK	Jae Hong Lee | Young Seok Jung	2006-0198462	7564916	H04B-007/02
20	2005-287370	2005-11-28	ELECTROMAGNETIC ACOUSTIC TRANSDUCER FOR GENERATING AND MEASURING BENDING VIBRATION IN ROD MEMBER USING ANTI-SYMMETRIC MAGNETIC FIELD STRUCTURE	Yoon Young Kim | Soon Woo Han	2006-0210100	7742616	H04R-025/00
21	2005-302635	2005-12-14	FLIP-CHIP BONDING STRUCTURE USING MULTI CHIP MODULE-DEPOSITED SUBSTRATE	Kwang-Seok Seo | Sang-Sub Song	2007-0001314	7375428	H01L-023/48
22	2005-590728	2005-02-26	POROUS FILM TYPE SOLVENT-FREE POLYMER ELECTROLYTE FILLED WITH OLIGOMER/PREPOLYMER ELECTROLYTE AND SECONDARY BATTERY EMPLOYING THE SAME	Seung-Yeop Kwak | Jae-Deok Jeon	2008-0038642	7468226	H01M-010/40
23	2005-719923	2005-12-06	SADDLE TYPE MOS DEVICE	Jong-Ho Lee	2009-0108358		H01L-029/78
24	2005-719934	2005-12-06	SADDLE TYPE FLASH MEMORY DEVICE AND FABRICATION METHOD THEREOF	Jong-Ho Lee	2008-0157172	7498632	H01L-029/788
25	2005-722781	2005-12-23	FABRICATION OF MESOPOROUS METAL ELECTRODES IN NON-LIQUID-CRYSTALLINE PHASE AND ITS APPLICATION	Hee-Chan Kim | Taek Dong Chung | Sejin Park | Hankil Boo | Sunyoung Lee	2008-0096089		H01M-004/02
26	2006-368609	2006-03-07	APPARATUS AND METHOD FOR TRANSMISSION WHICH ENCODING A MESSAGE WITH SPACE-TIME TUBO CODE USING FEEDBACK BIT IN MOBILE COMMUNICATION SYSTEM	Jae Hong Lee | Chi Hoon Yoo	2006-0212774	7684510	H04L-007/02
27	2006-407703	2006-04-20	HIGH EFFICIENCY MERCURY-FREE FLAT LIGHT SOURCE STRUCTURE, FLAT LIGHT SOURCE APPARATUS AND DRIVING METHOD THEREOF	Ki-Woong Whang | Ju-Kwang Lee	2006-0290267	7781976	H01J-001/62
28	2006-520541	2006-09-13	DISTRIBUTED OPPORTUNISTIC SCHEDULING IN IEEE 802.11 WIRELESS LOCATION AREA NETWORKS (WLANS)	Seong-il Hahm | Jong-won Lee | Chong-kwon Kim	2008-0063106	7792138	H04J-003/02
29	2006-582296	2006-10-18	MULTI-TRANSMISSION/RECEPTION ANTENNA DEVICE AND MULTI-TRANSMISSION/RECEPTION METHOD IN MULTI-USER AND MULTI-CELL ENVIRONMENT	Huiwon Je | Kwangbok Lee	2007-0298718	7773949	H04B-015/00
30	2006-816296	2006-03-31	FAST BATCH VERIFICATION METHOD AND APPARATUS THERE-OF	Jung hee Cheon	2009-0112956	8078877	H04L-009/14
31	2006-918967	2006-04-21	FLASH MEMORY DEVICE	Jong-ho Lee	2009-0212344	8030699	H11L-029/788
32	2006-996691	2006-12-07	METHOD OF FABRICATING A CHROMIUM NITRIDE COATED SEPARATOR	Dae Geun Nam | Hu Chul Lee	2010-0143825	8124298	H01M-002/32
33	2007-226207	2007-01-19	PULSE AREA MODULATION AND HIGH-EFFICIENCY LINEAR POWER AMPLIFIER SYSTEM USING THE SAME	Sang-Wook Nam | Young-Sang Jeon	2009-0273396	7884667	H03F-003/38

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	Number	Date					
34	2007-307127	2007-09-03	MODIFIED SLM SCHEME WITH LOW COMPLEXITY FOR PAPR REDUCTION OF OFDM SYSTEMS	Jong-Seon No | Dong Joon Shin | Seok-Joong Heo | Hyung Suk Noh	2010-0110875	7929414	H04J-011/00
35	2007-309959	2007-09-20	MEMORY CELL DEVICE HAVING VERTICAL CHANNEL AND DOUBLE GATE STRUCTURE	Byung Gook Park | Il Han Park	2009-0242965	7863643	H01L-029/66
36	2007-310532	2007-08-27	FIN FIELD EFFECT TRANSISTOR HAVING LOW LEAKAGE CURRENT AND METHOD OF MANUFACTURING THE FINFET	Jong Ho Lee	2010-0270619	7906814	H01L-029/76
37	2007-312717	2007-11-19	HIGH DENSITY FLASH MEMORY DEVICE AND FABRICATING METHOD THEREOF	Jong-Ho Lee	2010-0052043	8035157	H01L-029/792
38	2007-312985	2007-12-04	HIGH DENSITY FLASH MEMORY DEVICE ,CELL STRING FABRICATING METHOD THEREOF	Jong-ho Lee	2010-0038698		H01L-029/792
39	2007-442943	2007-09-21	QUANTUM DOTS HAVING COMPOSITION GRADIENT SHELL STRUCTURE AND MANUFACTURING METHOD THEREOF	Kookheon Char | Seonghoon Lee | Wan Ki Bae | Hyuck Hur	2010-0140586		H01L-029/12
40	2007-673886	2007-02-12	WIRELESS NETWORK CHANNEL ALLOCATION METHOD AND MULTI-HOP WIRELESS NETWORK SYSTEM USING THE SAME	Seongho Cho | Chong-kwon Kim	2008-0151821	7773558	H04W-004/00
41	2007-675954	2007-02-16	OVERHEAR-BASED TRANSMITTING CONTROL SYSTEM IN WLANS	Ha-young Oh | Sung-ro Yoon | Ki-baek Yoo | Chong-kwon Kim	2008-0181101	7746837	H04W-004/00
42	2007-736114	2007-04-17	FLASH MEMORY DEVICE AND FABRICATING METHOD THEREOF COMPRISING A BODY RECESS REGION	Jong-ho Lee	2008-0258199	7872297	H01L-029/788
43	2007-822340	2007-07-05	METHOD OF DESIGNING ROTARY THERMAL ACTUATOR AND ROTARY THERMAL ACTUATOR	Seok Heo | Yoon Young Kim	2008-0073997	7719161	H02N-010/00
44	2007-826097	2007-07-12	MICROSPEAKER AND METHOD OF DESIGNING THE SAME	Woo-Chul Kim | Yoon-Young Kim	2008-0170745	8050445	H04R-011/02
45	2007-830227	2007-07-30	DIELECTRIC FILM, METHOD OF MANUFACTURING THE SAME, AND SEMICONDUCTOR CAPACITOR HAVING THE DIELECTRIC FILM	Cheol-Seong Hwang | Hyun-Ju Lee	2008-0048227	7575940	H01L-021/00
46	2008-055881	2008-05-08	HIGH DENSITY FLASH MEMORY CELL DEVICE, CELL STRING AND FABRICATION METHOD THEREFOR	Jong-Ho Lee	2011-0254076		H01L-029/792
47	2008-197561	2008-08-25	SEMICONDUCTING DEVICES AND METHODS OF MAKING THE SAME	Yong Hyup Kim | Hyeong Uk Im	2010-0043873		H01L-031/0336
48	2008-197961	2008-08-25	RECONFIGURABLE SEMICONDUCTOR DEVICE	Seunghun Hong | Sung Myung | Kwang Heo	2010-0044777	7968935	H01L-029/792
49	2008-198744	2008-08-26	CIRCUIT BOARD INCLUDING ALIGNED NANOSTRUCTURES	Seung Hun Hong | Min Baek Lee	2010-0051320		H05K-001/00
50	2008-200929	2008-08-28	HIGH PERFORMANCE ONE-TRANSISTOR DRAM CELL DEVICE AND MANUFACTURING METHOD THEREOF	Jong-Ho Lee | Ki-Heung Park	2010-0102372	8143656	H01L-029/94
51	2008-234491	2008-09-19	FIELD EMISSION CATHODE CAPABLE OF AMPLIFYING ELECTRON BEAM AND METHODS OF CONTROLLING ELECTRON BEAM DENSITY	Yong Hyup Kim | Wal Jun Kim	2010-0045158	7915800	H01J-063/04

No.	Application		Title of Invention	Inventors	Publication Number	Patent Number	Main IPC
	Number	Date					
52	2008-234529	2008-09-19	CIRCUIT BOARD INCLUDING ALIGNED NANOSTRUCTURES	Seung Hun Hong | Sung Myung | Ju Wan Kang	2010-0032197		H05K-001/11
53	2008-314163	2008-12-05	FLASH MEMORY CELL STRING	Jong-Ho Lee	2009-0184362	7960778	H01L-029/788
54	2008-531436	2008-08-19	METHOD FOR PRODUCTION OF THIN FILM AND APPARATUS FOR MANUFACTURING THE SAME	Nong Moon Hwang | Yung Bin Chung | Dong Kwon Lee	2010-0136767		H01L-021/326
55	2008-674148	2008-04-03	CONDUCTIVE NANOMEMBRANE, AND MEMS SENSOR OF USING THE SAME	Yong Hyup Kim | Jung Hoon Lee | Tae June Kang | Eui Yun Jang	2011-0031566		H01L-029/84
56	2008-676728	2008-07-18	TRANSMITTING AND RECEIVING APPARATUS HAVING PLURAL ANTENNA IN MULTI-USER ENVIRONMENTS AND METHOD THEREOF	Kwangbok Lee | Byongok Lee | Illsoo Sohn | Huiwon Je	2010-0232534		H04B-007/02
57	2008-738652	2008-10-17	ULTRAFAST MAGNETIC RECORDING ELEMENT AND NONVOLATILE MAGNETIC RANDOM ACCESS MEMORY USING THE MAGNETIC RECORDING ELEMENT	Sang-Koog Kim | Ki-Suk Lee | Young-Sang Yu	2010-0207220		H01L-029/82
58	2009-057581	2009-08-04	APPARATUS FOR REMOVING INTERFERENCE BETWEEN NEIGHBOR CELLS IN A RADIO COMMUNICATION SYSTEM, AND METHOD FOR SAME	Yong Hwan Lee | Seung-Hwan Lee	2011-0183692		H04B-015/00
59	2009-058698	2009-08-06	SIGNAL TRANSMISSION APPARATUS AND METHOD USING EIGEN ANTENNA TECHNIQUE IN WIRELESS COMMUNICATION SYSTEM	Yong Hwan Lee | Jae Yun Ko	2011-0159825		H04B-001/02
60	2009-062557	2009-09-07	STRUCTURE OF THIN NITRIDE FILM AND FORMATION METHOD THEREOF	Euijoon Yoon | Kookheon Char | Jong Hak Kim | Sewon Oh | Heeje Woo	2011-0156214		H01L-029/20
61	2009-123458	2009-09-24	HIGH-DENSITY FLASH MEMORY CELL STACK, CELL STACK STRING, AND FABRICATION METHOD THEREOF	Jong-Ho Lee	2011-0198687		H01L-027/105
62	2009-126424	2009-10-27	APPARATUS AND METHOD FOR AVOIDING INTERFERENCE NOISE IN FHSS SYSTEM	Yong Hwan Lee | Seung Hwan Lee	2011-0261861		H04B-001/713
63	2009-139412	2009-09-25	CUBIC OR OCTAHEDRAL SHAPED FERRITE NANOPARTICLES AND METHOD FOR PREPARING THEREOF	Taeghwan Hyeon | Dokyoon Kim	2011-0303869		H01F-001/36
64	2009-142936	2009-12-29	ORGANIC ELECTROLUMINESCENCE DEVICE AND METHOD OF MANUFACTURING SAME	Jang-Joo Kim | Hyong-Jun Kim | Hwan-Hee Cho	2011-0266577		H01L-051/52
65	2009-320620	2009-01-30	CELL DEVICE AND CELL STRING FOR HIGH DENSITY NAND FLASH MEMORY	Jong-Ho Lee	2009-0230461		H01L-029/792
66	2009-355078	2009-01-16	POLYCRYSTALLINE SILICON SOLAR CELL HAVING HIGH EFFICIENCY AND METHOD FOR FABRICATING THE SAME	SEUNG KI JOO | HYEONG SUK YOO | YOUNG SU KIM	2009-0183772		H01L-031/00
67	2009-355098	2009-01-16	POLYCRYSTALLINE SILICON SOLAR CELL HAVING HIGH EFFICIENCY AND METHOD FOR FABRICATING THE SAME	Seung Ki Joo | Hyeong Suk Yoo | Young Su Kim | Nam Kyu Song	2009-0178711		H01L-031/0368
68	2009-391590	2009-02-24	COOPERATIVE DIVERSITY METHOD AND COOPERATIVE DIVERSITY SYSTEM USING OPPORTUNISTIC RELAYING	Jae Hong LEE | Dongwoo LEE	2010-0166095		H04L-001/02
69	2009-562502	2009-09-18	METHOD FOR LOSSLESS HANDOVER IN VEHICULAR WIRELESS NETWORKS	Ha Young OH | Chong Kwon KIM	2011-0013586		H04W-036/00

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	Number	Date					
70	2009-571771	2009-10-01	SOURCE ANTENNA SWITCHING SCHEME FOR NON-ORTHOGONAL PROTOCOL	Jong-Seon No | Dong-Joon Shin | Xianglan Jin | Jae-Dong Yang	2010-0296433		H04B-007/14
71	2009-580631	2009-10-16	BLIND SLM AND PTS METHOD WITH LOW DECODING COMPLEXITY OF OFDM SIGNALS	No Jong-Seon | Shin Dong-Jeon | Joo Hyun-Seung | Heo Seok-Joong | Jeon Hyun-Bae	2011-0090972		H04L-027/28
72	2009-582430	2009-10-20	DRIVING METHOD FOR HIGH EFFICIENCY MERCURY-FREE FLAT LIGHT SOURCE STRUCTURE, AND FLAT LIGHT SOURCE APPARATUS	Ki-Woong Whang | Ju-Kwang Lee	2010-0039040		H05B-041/00
73	2009-592647	2009-12-01	METAL ION SENSOR AND FABRICATING METHOD THEREOF	Kookheon Char | Hosub Kim	2010-0252807		H01L-051/52
74	2009-604877	2009-10-23	FORMING ACTIVE CHANNEL REGIONS USING ENHANCED DROP-CAST PRINTING	Seonghoon Lee | Jung-Pyo Hong	2010-0155710		H01L-051/30
75	2009-622771	2009-11-20	PREPARATION METHOD OF ZNSB-C COMPOSITE AND ANODE MATERIALS FOR SECONDARY BATTERIES CONTAINING THE SAME COMPOSITE	Cheol-Min Park | Hun-Joon Sohn	2010-0159328		H01M-004/58
76	2009-811794	2009-01-06	LIGHT EMITTING DIODE COATING METHOD	Sunghoon Kwon | Euijoon Yoon | Wook Park	2010-0276716		H01L-033/26
77	2009-812816	2009-01-14	LIGHT EMITTING DEVICE USING DIODE STRUCTURE CONTROLLED BY DOUBLE GATE, AND SEMICONDUCTOR APPARATUS INCLUDING THE SAME	Youngjune Park | Hunsuk Kim | Seokha Lee | Byunghak Cha | Kangmu Lee | Junho Chun | Sunghoon Kwon | Chanhyeong Park | Inyoung Jeong	2011-0050121		H05B-037/02
78	2009-919962	2009-02-18	SOLAR CELL APPARATUS USING MICROLENS AND METHOD FOR MANUFACTURING SAME	Sunghoon Kwon | Junhoi Kim	2011-0061717		H01L-031/052
79	2009-936901	2009-10-01	MULTIFERROIC MATERIAL AND METHOD OF MANUFACTURING THE SAME	Kee-Hoon Kim | Yisheng Chai | Sae-Hwan Chun	2011-0031434		H01F-001/01
80	2009-991426	2009-05-06	CHANNEL INFORMATION GENERATING DEVICE AND METHOD FOR SPATIAL DIVISION MULTIPLEXING ALGORITHM IN A WIRELESS COMMUNICATION SYSTEM, AND DATA TRANSMISSION APPARATUS AND METHOD ADOPTING THE SAME	Yong Hwan Lee | Jae Yun Ko | Seung Hyeon Yang	2011-0261675		H04W-004/00
81	2009-994158	2009-05-28	MAGNONIC CRYSTAL SPIN WAVE DEVICE CAPABLE OF CONTROLLING SPIN WAVE FREQUENCY	Sang-koog Kim | Ki-suk Lee | Dong-soo Han	2011-0102106		H03H-009/15
82	2010-145964	2010-01-22	ANTENNA FOR INDUCTIVELY COUPLED PLASMA GENERATION, INDUCTIVELY COUPLED PLASMA GENERATOR, AND METHOD OF DRIVING THE SAME	Young June Park | Il Wook Kim	2012-0037491		H05H-001/50
83	2010-262342	2010-03-29	METHOD FOR COATING LIGHT-EMITTING DEVICES, LIGHT COUPLER, AND METHOD FOR MANUFACTURING THE LIGHT COUPLER	Sung Hoon Kwon | Su Eun Chung	2012-0032200		H01L-027/15
84	2010-321572	2010-05-18	LIGHT EMISSION DEVICE AND MANUFACTURING METHOD THEREOF	Gyu-Chul Yi | Chul-Ho Lee	2012-0061646		H01L-033/06
85	2010-708342	2010-02-18	HIGH-PERFORMANCE ONE-TRANSISTOR FLOATING-BODY DRAM CELL DEVICE	Jong-Ho LEE	2010-0207180		H01L-027/108
86	2010-717699	2010-03-04	UPLINK SCHEDULING METHOD USING ONE BIT PER USER FEEDBACK	Jae Hong Lee | Jung Min Choi	2011-0216714		H04W-072/12

SECTION H
ELECTRICITY

No.	Application		Title of Invention	Inventors	Publication Number	Patent Number	Main IPC
	Number	Date					
87	2010-766280	2010-04-23	METHOD FOR FABRICATING NOVEL HIGH-PERFORMANCE FIELD-EFFECT TRANSISTOR BIOSENSOR BASED ON CONDUCTIVE POLYMER NANOMATERIALS FUNCTIONALIZED WITH ANTI-VEGF ADAPTER	Jyong Sik Jang | Oh Seok Kwon | Seon Joo Park	2011-0237012	8138005	H01L-021/00
88	2010-787515	2010-05-26	ACCESS POINT FOR PROVIDING WLAN VIRTUALIZATION, WLAN VIRTUALIZATION SYSTEM AND METHOD OF PROVIDING ACCESS TO WIRELESS COMMUNICATION NETWORK	Hee Jin LEE | Yong Hyu Kim | Seong Il Hahm | Chong Kwon Kim	2011-0013608		H04W-084/02
89	2010-794062	2010-06-04	THIN FILM TRANSISTOR AND METHOD FOR FABRICATING THIN FILM TRANSISTOR	Sun Jae Kim | Min Koo Han	2011-0198592		H01L-029/786
90	2010-896975	2010-10-04	FLEXIBLE DYE-SENSITIZED SOLAR CELL AND PREPARATION METHOD THEREOF	SUNG-HOON AHN | DOO-MAN CHUN | MIN-SAENG KIM	2011-0240112		H01L-031/0224
91	2010-939928	2010-11-04	OPPORTUNISTIC CONCURRENT TRANSMISSION METHOD OF WIRELESS NETWORK AND WIRELESS NETWORK SYSTEM USING THE SAME	Chong Kwon Kim | Young Myoung Kang | Joon Soo Lee	2011-0305148		H04L-012/26
92	2010-939933	2010-11-04	WIRELESS NETWORK SYSTEM AND ASSOCIATION CONTROL METHOD THEREOF	Chong Kwon KIM | Young Myoung Kang | Joon Soo Lee	2011-0305229		H04W-084/02
93	2010-955139	2010-11-29	LIGHT EMITTING DEVICE HAVING PHOTONIC CRYSTAL STRUCTURE	Heon Su JEON | Kook Heon CHAR | Yoon Kyung CHOI | Ho Sub KIM	2011-0068676		H01J-001/62
94	2011-005294	2011-01-12	PRODUCT CODE DECODING METHOD AND DEVICE	Beomkyu Shin | Hosung Park | Seokbeom Hong | Jong-Seon No | Dong-Joon Shin	2012-0060071		H03M-013/00
95	2011-010360	2011-01-20	PILLAR-TYPE FIELD EFFECT TRANSISTOR HAVING LOW LEAKAGE CURRENT	Jong-Ho LEE	2011-0121396		H01L-029/78
96	2011-023646	2011-02-09	3D STACKED ARRAY HAVING CUT-OFF GATE LINE AND FABRICATION METHOD THEREOF	Byung-Gook Park | Seongjae Cho | Won Bo Shim	2011-0241098		H01L-029/792
97	2011-030065	2011-02-17	FIELD EMISSION CATHODE CAPABLE OF AMPLIFYING ELECTRON BEAM AND METHODS OF CONTROLLING ELECTRON BEAM DENSITY	Yong Hyup Kim | Wal Jun Kim	2011-0140602		H01J-029/98
98	2011-089206	2011-04-18	RECONFIGURABLE SEMICONDUCTOR DEVICE	Seunghun Hong | Sung Myung | Kwang Heo	2011-0210765		H03K-003/01
99	2011-170533	2011-06-28	NAND FLASH MEMORY ARRAY WITH CUT-OFF GATE LINE AND METHODS FOR OPERATING AND FABRICATING THE SAME	Byung-Gook Park | Seongjae Cho	2011-0256680		H01L-021/8247
100	2011-181995	2011-07-13	THIN FILM TRANSISTOR AND METHOD FOR FABRICATING THIN FILM TRANSISTOR	Sung Hwan Choi | Min Koo Han	2012-0018721		H01L-029/786
101	2011-222246	2011-08-31	NAND FLASH MEMORY ARRAY HAVING PILLAR STRUCTURE AND FABRICATING METHOD OF THE SAME	Byung Gook Park | Seong Jae Cho	2012-0058619		H01L-021/336


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