

type of seeds	number	field	title	researcher	summary	patent number	posted
patent	56	Life sciences	Apparent Chemical Species Measuring Method and Measuring System	Professor Faculty of Science and Engineering School of Advanced Science and Engineering Department of Electrical Engineering and Bioscience	This is a method of measuring blood flow, etc. at the surface of a human body by applying light to the surface and conducting a spectrum analysis of the reflected light, as well as a technique related to this measuring system. This invention may be customized for various sicknesses. Furthermore, it offers a method of processing data observed from the skin's surface which reduces errors in the detection of sicknesses, as well as a simple-structured measuring system which requires no filters.		2014/04/03
patent	130	Life sciences	Massage robot and control program for the same, and robot for identifying body parts	Professor Faculty of Science and Engineering	This invention is a robot that accurately captures the condition of the target parts in a massage, and which is able to automatically provide massages that are close to the massages provided by a massage practitioner. This robot automatically determines the massage parts such as salivary glands in the face, and is able to achieve motions that are close to the facial massages provided by practitioners such as doctors.		2014/04/03
patent	173	Life sciences	Fluid circulation apparatus	Professor Faculty of Science and Engineering School of Creative Science and Engineering Department of Modern Mechanical Engineering	This is a circulation circuit without air contact made of several (three to four) pulsatile flow pumps and one compliance tube that simulates aortic elasticity properties.		2014/04/03
patent	390	Life sciences	Hearing aid processing method and hearing aids using it	Part-time Lecturer (retired) Faculty of Science and Engineering Graduate School of Fundamental Science and Engineering	By correcting audio signals that have been input such that the auditory nerve excitation patterns for the hearing impaired are the same as the patterns for people with normal hearing, and converting the voices, this technology compensates for the deterioration in frequency selectivity and allows the user to hear environmental sounds with the same sensations that a person with normal hearing experiences. This device can be worn comfortably and it improves the degree of understanding of speech under noisy conditions, thereby improving the efficacy of hearing aids.		2014/04/03
patent	452	Life sciences	Bloodstream simulator and stream convertor	Professor Faculty of Science and Engineering School of Creative Science and Engineering Department of Modern Mechanical Engineering	This simulation device is able to accurately reproduce coronary artery flow which have different flow conditions from aortic flow. It is also able to carry out various assessments accurately for artificial organs, medical equipment, and surgical methods, etc. that are applied in the respective flow conditions. Through this device, it is possible to avoid animal and human experimentation when carrying out various assessments, such as stent (vasodilatation bracket) performance evaluation that is used in the treatment of arteriosclerosis and other diseases, and the evaluation of anastomosis of coronary artery.		2014/04/03
patent	487	Life sciences	Puncture controller, puncture robot and a program for puncture control	Professor (retired) Faculty of Science and Engineering School of Creative Science and Engineering Department of Modern Mechanical Engineering	This invention relates to puncture controller, puncture robot and a program for puncture control, which are used to puncture living tissue using robots. Through this invention, it is possible to predict the movement of the needle in consideration of the characteristics of the living tissue, and decide on its path. As such, it is not exclusively dependent on the experience and intuition of the doctor, enabling it to ensure that the needle punctures its target accurately.		2014/04/03
patent	617	Life sciences	Neutrophil function inspection system and method	Professor Faculty of Sport Sciences School of Sport and Sciences	This is a proposal for neutrophil function inspection system using a chemiluminescence method and hydrogel that can separate chemotactic cells or organisms. This system can easily take quantitative measurements of neutrophil functions (chemotactic activity, active oxygen-producing capacity) with short life span using whole blood. A study is currently being conducted on the measurement of the anti-oxidizing capacity of neutrophil on pectin and lycopene.		2014/04/03
patent	659	Life sciences	Simulation unit, control unit, and operation robot control system using them, and program for simulation unit	Professor (retired) Faculty of Science and Engineering School of Creative Science and Engineering Department of Modern Mechanical Engineering	This invention is for movement control for operations support robots that are used for minimally invasive surgery. When the manipulator approaches its target living tissue such as organs, it obtains information about the force to apply to the target while controlling the movements of the manipulator. It is able to avoid placing excessive burden on specific parts such as blood vessels and nerves, and is able to prevent causing unexpected damage to specific parts during surgery carried out by robots.		2014/04/03

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patent	711	Life sciences	Motion compensation system for operation robots	Professor (retired) Faculty of Science and Engineering School of Creative Science and Engineering Department of Modern Mechanical Engineering	This invention is a motion compensation system for operation robots, which is used when robots carry out surgery for organs in motion. This invention is able to automatically switch between synchronizing and not synchronizing the movements of the operation robot with the organ motions in accordance with the operator's treatment requirements. This makes it possible to carry out surgical procedures without being conscious about the pulsation of the organ.		2014/04/03
patent	810	Life sciences	Magnetic fine particle-containing cells and method for producing the same	Senior Research Professor Faculty of Science and Engineering School of Advanced Science and Engineering Department of Applied Chemistry	This invention relates to magnetic fine particle-containing cells which can be used in medicinal treatments such as immune cell treatment, etc. and medical diagnostics such as magnetic resonance imaging diagnosis (MRI), etc. With this invention, magnetic fine particle-containing cells containing well-dispersed magnetic fine particles with a small grain size can be manufactured efficiently. The magnetic fine particle-containing cells of this invention can also be applied to thermotherapy, etc. utilizing magnetic induction.		2014/04/03
patent	814	Life sciences	Puncture ablation planning support device and program thereof, and puncture ablation condition determining method	Professor (retired) Faculty of Science and Engineering School of Creative Science and Engineering Department of Modern Mechanical Engineering	This invention decides the optimum conditions of piercing for the electrode needle and amount of electricity supplied to the needle in the puncture therapy by measuring the extent of the changes in the focal site and the changes in the surrounding temperature distribution. With this invention, it is possible to reliably destroy the focal site that is the target without having an effect on the tissue surrounding the focal site, contributing to improving the precision of puncture therapy.		2014/04/03
patent	815	Life sciences	Support device and its program for puncture planning and method for determining conditions of piercing	Professor (retired) Faculty of Science and Engineering School of Creative Science and Engineering Department of Modern Mechanical Engineering	This invention enables high-precision planning of puncture trajectories in a variety of puncture states by using a simulation to comprehensively determine the quality of the conditions of piercing such as the piercing location and piercing angle, etc. of the needle with respect to the body tissue surface in puncture therapy and finding the quality as an "expected value."		2014/04/03
patent	902	Life sciences	Interaction activating system and interaction activating robot	Professor Faculty of Science and Engineering School of Fundamental Science and Engineering Department of Computer Science and Engineering	In conversations, discussions, computer games, etc. moderated by a facilitator, this invention creates conditions that enable the participants other than the facilitator to have more fun. The technology enables a system possessing either a device that detects the progress status of the computer game, a device that detects the level of activity of the participants in the computer game, or knowledge of the episodes in each topic of the computer game (an interaction activating robot) to participate in a computer game as a virtual participant. The technology can be adapted to areas such as individual computer games, on-line games, etc.		2014/04/03
patent	935	Life sciences	Bio-sensing method and immobilization method	Senior Research Professor Faculty of Science and Engineering School of Advanced Science and Engineering Department of Applied Chemistry	This invention combines biological substance with a disc substrate that has formed an organic monomolecular film and scans with a magnetic or magnetic optical head to carry out two-dimensional detection. It enables simple simultaneous measurement of a variety of samples.		2014/04/03
patent	939	Life sciences	Simulated constricted blood vessel and manufacturing method thereof	Professor Faculty of Science and Engineering Graduate School of Advanced Science and Engineering Cooperative Major in Advanced Biomedical Sciences	This invention is an artificial blood vessel for modeling stenotic lesions caused by the calcification of blood vessels, and the manufacturing method thereof. Elasticity near to that of an actual human constricted blood vessel can be obtained by mixing calcium carbonate powder with silicon, painting it on the narrow part of a mold, covering it with a polyethylene resin tube, and then coating the entire tube model with silicon.		2014/04/03
patent	961	Life sciences	Three-dimensional sheath flow forming structure and method for collecting fine particles	Professor Faculty of Science and Engineering School of Fundamental Science and Engineering Department of Electronic and Photonic Systems	This invention develops micro-fluid device-based cell/organelle sorters using the sheath flow composition. The creation process of the device is even less than with conventional technology so it enables the realization of high reproducibility and mass production of the fabrication process.		2014/04/03
patent	1069	Life sciences	Field-effect transistor, method for producing the same, and a biosensor	Professor Faculty of Science and Engineering School of Fundamental Science and Engineering	In a field-effect transistor-type sensor operating in an electrolyte solution, forms source and drain electrodes from titanium (Ti), and forms titanium dioxide (TiO <sub>2</sub> ) thin films in the aforementioned titanium electrodes so that there is no short circuit in the electrolytic solution.		2014/04/03

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patent	1117	Life sciences	Mutational analysis method for JAK2 genes	Professor Faculty of Science and Engineering School of Advanced Science and Engineering Department of Life Science and Medical Bioscience	This method uses a fluorescent probe as a method of measuring the JAK2 gene mutations seen in chronic myeloproliferative disorders (MPDs). It enables quantification that is highly sensitive, simple, low cost, and high throughput. Applications to pharmaceutical screening methods, etc. are also expected.		2014/04/03
patent	1125	Life sciences	Conversational robot	Professor Faculty of Science and Engineering School of Fundamental Science and Engineering Department of Computer Science and Engineering	This is technology for a robot that can participate in a group conversation and not only converse but also naturally fit into the atmosphere of the conversation venue. This robot can take part inside a circle of multiple people conversing not only as a direct listener with respect to the speaker but also as a third listener with interest in the conversation, without any sense of strangeness. For this purpose the inventors have created natural movements for the robot in which its line of sight is directed towards the speaker while its body is oriented toward the conversational circle. Applications for supporting the lives of elderly people, etc. can be expected.		2014/04/03
patent	8	Life sciences	Artificial Coronary Artery, Coronary Artery Stent Performance Evaluation Simulator	Professor Faculty of Science and Engineering School of Creative Science and Engineering Department of Modern Mechanical Engineering	This apparatus is a coronary circulation simulator that simulates bodily functions, and is used for safe and effective evaluations and tests of devices which have coronary artery functions, such as coronary artery stents.		2014/04/03
patent	82	Information	Edit method for stereoscopic video signal, and optical adaptor for a video camera for stereoscopic video photographing	Professor Faculty of Science and Engineering School of Fundamental Science and Engineering Department of Intermedia Art and Science	This invention relates to the input of stereoscopic images and the editing format. One camera captures images on the left and right through time-sharing, and carries out integrated management of each image through software. In this way, it produces image effects such as zooming and rotation of stereoscopic images in a cheap and flexible manner.		2014/04/03
patent	94	Information	Sentence evaluating device and sentence evaluating program	Professor Faculty of Science and Engineering School of Creative Science and Engineering Center for English Language Education	This learning system aims to computerize the evaluation of answer sentences in English compositions in an objective manner, in line with actual situations. It not only assesses the similarity of words used between the model answer and the answer provided in English compositions, but conducts various evaluations through other unique elements.		2014/04/03
patent	97	Information	Language learning system, and program for language learning	Professor Faculty of Letters, Arts and Sciences School of Humanities and Social Sciences	This system enhances the efficiency of language education with a focus on hearing in online language education. When the user specifies words using the mouse and drags-and-drops it, the pronunciation is output as audio during the drag-and-drop interval.		2014/04/03
patent	123	Information	Network construction device for appliance integration	Professor Faculty of Science and Engineering School of Fundamental Science and Engineering Department of Computer Science and Engineering	This device carries out integrated management for different types of domestic networks through the use of internet protocol. It enables integrated communication through URL, and provides gateways at the application level that processes control commands embedded in the URL.		2014/04/03
patent	124	Information	Universal interconnection device for network equipment	Professor Faculty of Science and Engineering School of Fundamental Science and Engineering Department of Computer Science and Engineering	This handles input and output protocols in the home in a consolidated manner, and automatically controls bit map screen and audio output corresponding to the equipment. Through a technology that incorporates thin client structure (diskless WS) into application software, it is able to realize a ubiquitous environment for the future.		2014/04/03
patent	139	Information	Measuring apparatus	Professor (retired) Faculty of Science and Engineering Waseda Research Institute for Science and Engineering	This invention is an apparatus used to measure the location of features in road areas. It enables the measuring of the location of features on roads except the white lines and on the sides of roads, using a mobile mapping system (MMS). In particular, it can measure locations to a high degree of accuracy for specular features such as glass and narrow-width features such as distance markers, which are difficult to measure using conventional MMS.		2014/04/03

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patent	291	Information	Search method for similar cases of process state, process state prediction method, and storage media	Professor Faculty of Science and Engineering School of Advanced Science and Engineering Department of Electrical Engineering and Bioscience	This invention conducts high-speed and high-precision searches for the current operation state of complex, non-linear, and non-stationary processes, as well as similar past cases. Furthermore, accurate future predictions produced by this invention serve as important guides for determining operation actions in the future, and contribute significantly to the stabilization of operations.		2014/04/03
patent	293	Information	Stereoscopic video evaluation device and stereoscopic video tuner	Professor Faculty of Science and Engineering School of Fundamental Science and Engineering Department of Intermedia Art and Science	With the revitalization of the stereoscopic image market, there have been calls for an evaluation system for "safety," such as degree of burden on the vision of the content viewer; and "level of comfort," such as whether the viewer can gain an appropriate sense of depth. In light of that, I have developed a system that is able to evaluate stereoscopic images easily and effectively, and present stereoscopic images in the most optimal conditions based on the results of this evaluation.		2014/04/03
patent	314	Information	Search method for similar cases of process state, process state prediction method, and storage media	Professor Faculty of Science and Engineering School of Advanced Science and Engineering Department of Electrical Engineering and Bioscience	This invention conducts high-speed searches for the latest operation state of complex, non-linear, and non-stationary processes (such as blast furnaces) that are currently in operation, as well as similar past cases, accurately predicts the future state of processes, and provides online predictive methods that do not require updates.		2014/04/03
patent	315	Information	Stereoscopic image presentation apparatus	Professor Faculty of Science and Engineering School of Fundamental Science and Engineering Department of Intermedia Art and Science	This stereoscopic display system carries out optical correction, makes adjustments during the viewing of stereoscopic images, and reduces misalignment in convergence. This apparatus moves the image presentation screen in sync with the playback position of stereoscopic images being presented by the software.		2014/04/03
patent	445	Information	Stereoscopic image presentation apparatus	Professor Faculty of Science and Engineering School of Fundamental Science and Engineering Department of Intermedia Art and Science	This apparatus is able to present accurate and natural stereoscopic images by controlling image presentation in real-time in response to changes in the playback environment, such as the angle of incline to the image presentation screen and the visual distance from the audience to the presentation screen. Hence, it does not simply provide a one-sided presentation of stereoscopic images to the audience, but is also able to present optimal stereoscopic images in an interactive manner depending on the movement or operation of the audience.		2014/04/03
patent	959	Information	Distance measuring device and program, and distance measuring system	Professor (retired) Faculty of Science and Engineering School of Creative Science and Engineering Department of Modern Mechanical Engineering	This technology uses stereo images captured with an endoscope to automatically find the distance from the tip of the endoscope to the internal organ. It identifies internal organs based on cross-checks against color patterns stored in advance and carries out left and right matching of stereo images.		2014/04/03
patent	1009	Information	Item selection method and equipment	Professor Faculty of Science and Engineering School of Fundamental Science and Engineering Department of Intermedia Art and Science	3D images are incorporated in movies, mobile phones, computer games, etc. and a lot of content and devices have been introduced to the market. This invention is a technology that focuses on the depth of focus of the eyes of the viewers to adjust and replay 3D images, and it enables viewers to enjoy 3D images without any sense of strangeness or feeling of fatigue.		2014/04/03
patent	1027	Information	Dictionary writing support equipment, dictionary writing support method and dictionary programs	Professor Faculty of Science and Engineering School of Fundamental Science and Engineering Department of Computer Science and Engineering	This invention is a method that uses anchor text linked to URLs on the Internet to write a dictionary of synonyms to the input words, and is also equipped with a function that deletes words which are not suitable as synonyms, and can raise the precision of synonym extraction.		2014/04/03
patent	1086	Information	Stage production system	Professor Faculty of Science and Engineering School of Creative Science and Engineering Department of Modern Mechanical Engineering	This is an image presentation system used in stage productions, etc. This system uses just one projector to achieve the dramatic impact that formerly required multiple projectors, by having the image split and projected onto both the screen and the surface of the floor.		2014/04/03

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patent	1116	Information	Three-dimensional image presentation equipment	Professor Faculty of Science and Engineering School of Fundamental Science and Engineering Department of Intermedia Art and Science	This is three-dimensional image presentation equipment that can express three-dimensional (3D) images naturally and in fine detail by combining multiple image presentation methods, including lenticular and other three-dimensional (3D) image presentation methods, with image presentation surfaces.		2014/04/03
patent	1131	Information	Frequency multiplier	Professor Faculty of Science and Engineering Graduate School of Information, Production, and Systems	This is an invention related to the circuits that take out the integral multiple harmonic that is generated in the case that the transistors are operated in the vicinity of pinch-off in the frequency multipliers that are mainly used in communications devices. It is possible to omit a part of the impedance-matching circuit by adjusting the constant of the fundamental wave suppression circuit.		2014/04/03
patent	1152	Information	Communication classification equipment and method	Professor Faculty of Science and Engineering School of Fundamental Science and Engineering Department of Computer Science and Engineering	This invention determines the reputation of addresses capable of handling addresses that in the past were unobserved and unknown and as a result detects malicious communications. This invention obtains the addresses covered by the determination of the terminals that generated the communications and extracts the unique features of the said addresses covered by the determination as a feature vector. They are stored in a training data memory device containing a list of addresses assigned labels showing whether or not they are maliciousness. It applies supervised machine learning to the feature vector and obtains the training results. From the training results it decisively determines whether the communications are normal communications or malicious communications.		2014/04/03
patent	1192	Information	Receiving equipment and receiving method	Professor Faculty of Science and Engineering Graduate School of Global Information and Telecommunication Studies	When receiving OFDM signals that apply SSB multiplexing, the equipment eliminates the impact components based on the information symbols of the other sidebands from the respective demodulation data from the upper sideband and the lower sideband and decrypts the demodulation data so that good transmission error properties can be obtained. Furthermore, it feeds back the decrypted information symbols to generate the above impact components.		2014/04/03
patent	692	Environment Life sciences	Lipolytic microorganism and method for treating wastewater containing oil and fat using the same	Guest Professor (retired)	This invention relates to a novel microorganism that can efficiently break down fats and oils from animals and vegetables that are contained in wastewater from kitchens and other sources, as well as the enzymes that are generated by this microorganism. It is a method of treating wastewater that contains fats and oils. In addition to being highly effective in breaking down wide variety of animal and vegetable fats and oils, it also has superb ability in breaking down fats and oils particularly in lard and environments with low temperatures. As such, it is an effective technology for restaurants that use much lard and in restaurants located in cold locations.		2014/04/03
patent	650	Nanotechnology / Materials	Laminated structures, ULSI circuit boards, and their formation methods	Senior Research Professor Faculty of Science and Engineering School of Advanced Science and Engineering Department of Applied Chemistry	This invention is related to metal structure and electroless plating processes that are used to embed copper in miniaturization trenches (grooves)/via with particularly high aspect ratio, in the field of multilayer wiring formation technology for ultra large-scale integrated circuits (ULSI). Through this technology, it is possible to construct completely electroless plating processes.		2014/04/03
patent	766	Energy	Micro fuel cell	Senior Research Professor Faculty of Science and Engineering School of Advanced Science and Engineering Department of Applied Chemistry	This invention realizes a micro fuel cell with a simplified structure that is capable of effective power generation without using an electrolyte membrane, by mounting the anode and the cathode adjacent to each other on the same surface of the same substrate. It can provide more miniaturized fuel cells, and is useful as the power source for micro devices. Moreover, once it has been integrated it is expected to be used as a power source for general electronic devices.		2014/04/03
patent	1123	Energy	An output restriction avoidance method for multiple-unit-connected photovoltaic power generation systems and the equipment necessary for the method	Professor Faculty of Science and Engineering School of Advanced Science and Engineering Department of Electrical Engineering and Bioscience	Photovoltaic power generation systems are able to correct inequalities in the volume of output restrictions between consumers (private homes) simply by adding functions to the existing equipment in multiple-unit-connected distribution systems. The systems measure the terminal voltage of the power conditioning subsystems (PCSs) installed in each home, calculate the difference between the power management value and the preset value, and then set the voltage rise suppression function operating voltage individually.		2014/04/03

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patent	1129	Energy	Active materials for rechargeable lithium batteries, negative electrodes for batteries, and batteries	Senior Research Professor Faculty of Science and Engineering School of Advanced Science and Engineering Department of Applied Chemistry	The cycle properties of rechargeable lithium ion batteries (discharged capacity retention rate/cycle) were greatly improved by forming an amorphous film produced with the electro-deposition process with Si, O, and C as its main constituents in an electrical power collector as a negative electrode active substance. The manufacturing process for forming the plating is also simple.		2014/04/03
patent	66	Manufacturing Technology	Soft Magnetic Thin Film, its Manufacturing Method, and Thin-film Magnetic Head Using the Same	Senior Research Professor Faculty of Science and Engineering School of Advanced Science and Engineering Department of Applied Chemistry	It provides a CoNiFe soft magnetic thin film which has high Bs and a superior low coercive force by the electroless plating method. A magnetic head using this soft magnetic thin film has a superior write performance.		2014/04/03
patent	163	Manufacturing Technology	Soft magnetic thin film, its manufacturing method, and thin-film magnetic head using the same	Senior Research Professor Faculty of Science and Engineering School of Advanced Science and Engineering Department of Applied Chemistry	With the aim of enabling high-speed writing, this invention studies the move toward high resistivity of CoNiFeB soft magnetic thin film through electroless plating, and makes it possible to produce electroless CoNiFeB soft magnetic thin film that has high $\rho$ , extremely high Bs, and low Hc.		2014/04/03
patent	235	Manufacturing Technology	Composite material containing bound water	Guest Professor (retired)	This material is used to prevent charged material (such as plastic) from carrying charges. It is a composite material that contains water that holds the fixed shape of bound water, originating from three-dimensionally cross-linked metal oxide containing bound water.		2014/04/03
patent	248	Manufacturing Technology	Charge application body, and the pattern-forming body that uses it	Professor Faculty of Science and Engineering School of Advanced Science and Engineering Department of Applied Chemistry	This technology focuses on crystalline semiconductors and makes use of the crystalline structures of crystalline semiconductors to form fine patterns at a low cost, which proved to be difficult in the past.		2014/04/03
patent	352	Manufacturing Technology	Micro-reactor and its manufacturing method	Professor Faculty of Science and Engineering School of Advanced Science and Engineering Department of Applied Chemistry	This technology eliminates the previous problem of mixing reagents in micro spaces by making it easy to observe micro spaces from external locations while making it difficult for reagents in adjacent containers to mix. In addition, it aims to provide micro-reactor array that has a container with a high aspect ratio, as well as its manufacturing method. Within the scope of this invention, it is also possible to deal with changes in conditions such as the thickness of the base and the container, the material and shape, the solution used, and etching.		2014/04/03
patent	615	Manufacturing Technology	Timber modifying method and timber modified thereby	Guest Professor (retired)	This invention keeps various types of medicinal substances that have been coated or immersed during timber modification, from being leached by water. It improves durability while maintaining the unique exterior and degree of humidity of timber. It also enables the use of timber in areas that it had not previously been used in for legal reasons, and is expected to contribute to expanding the demand for timber and reforestation in Japan.		2014/04/03
patent	651	Manufacturing Technology	Electroless copper plating bath, electroless copper plating method, and ULSI copper wiring formation method	Senior Research Professor Faculty of Science and Engineering School of Advanced Science and Engineering Department of Applied Chemistry	While preventing the formation of defects such as voids as far as possible, it can also embed trenches efficiently. Furthermore, without using the dry method for the formation of the seed layer, which makes it difficult for uniform attachment to fine trenches, all processes are made up of wet processes, making the process of embedding baths for trenches more uniform and steady.		2014/04/03
patent	774	Manufacturing Technology	Control device, control method, and bipedal walking robot	Professor Faculty of Science and Engineering	In the field of bipedal walking robots with human riders, this invention provides a control device and control method enabling a response to the application of force by the rider, and the bipedal walking robot. It can handle larger external forces, and is also capable of compensating for unstable elements such as small bumps in the surface of the road and the bending in each part of the robot, etc. so it realizes more stable bipedal walking. This technology is also useful for bipedal walking types of wheelchairs, etc. which can go up and down stairs.		2014/04/03
patent	797	Manufacturing Technology	Composition for cutting and grinding, cutting and grinding oil, cutting and grinding wheel and surface treatment material	Professor (retired)	This invention disperses mineral micro-particles which have an extremely low environmental load in cutting and grinding oil, etc. or attaches them to the surfaces of working tools for machining, in order to contribute to improving machining accuracy and tool life.		2014/04/03

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patent	806	Manufacturing Technology	Modifier providing organic polymer products with self-extinguishing properties, method of use of the modifier, and ors having self-extinguishing properties	Guest Professor (retired)	This invention can provide organic polymer products such as plastic, rubber, wood, paper, etc. with self-extinguishing properties simply and at a low cost, without reducing the physical properties of the products. It does not use substances such as halogen compounds, etc. which generate toxic gases when there is a fire so it has an extremely small impact on the environment. It can be used in all industries that employ organic polymer products, and it is expected to be used in the housing industry and auto industry in particular.		2014/04/03
patent	1018	Manufacturing Technology	Gas sampling device	Professor (retired)	This invention is a gas sampling device mounted on the flexible sampling bags used for cultivating photosynthetic microorganisms for the purpose of generating hydrogen production capacity and in tests to measure volatile organic compounds such as the formaldehyde and toluene contained in construction materials and adhesive agents. The user can collect from one sampling bag the sample gas in the bag any number of times over a period of time.		2014/04/03
patent	1038	Manufacturing Technology	Mold manufacturing method and the molds formed using the method	Professor Faculty of Science and Engineering School of Advanced Science and Engineering Department of Applied Chemistry	This invention provides an electrolytic thick-film metal mold with the feature that the adhesive force between the electroless nickel (Ni) plated film formed on the self-assembled film and the inorganic thin film on the substrate is greater than 10MPa and less than 50MPa. Embedding is also possible with nano-sized patterns and the shapes of three-dimensional structures.		2014/04/03
patent	1181	Manufacturing Technology	Low-temperature molds and low-pressure casting method	Professor Faculty of Science and Engineering School of Creative Science and Engineering Department of Modern Mechanical Engineering	This is a low-temperature molds and low-pressure casting method that can use low-temperature molds to enable low-pressure casting and thereby achieve refinement of the casting structure and manufacture hollow, thin-wall casting at the meter size.		2014/04/03
patent	1231	Manufacturing Technology	Flapping robot	Professor Faculty of Science and Engineering School of Fundamental Science and Engineering Department of Electronic and Photonic Systems	This invention is a compact unmanned aerial vehicle (or micro aerial vehicle (MAV)) which performs a flapping motion, and can freely change the angle of its flapping and feathering.		2014/04/03
patent	44	Manufacturing Technology	Method for Producing Fine Pattern	Senior Research Professor Faculty of Science and Engineering School of Advanced Science and Engineering Department of Applied Chemistry	This method is used when obtaining a pattern plating film of a soft magnetic thin film using an electroless plating bath. Pattern plating is obtained by adding a trace amount of an organic additive to the electroless plating bath, stirring the plating bath as appropriate, removing impurities from the bath, and thereby, improving selective precipitation properties.		2014/04/03
patent	202	Social	Method of measuring cracks on the surface of structural bodies	Professor Faculty of Science and Engineering School of Advanced Science and Engineering Department of Applied Physics	This is a method for detecting cracks using digital image data shot using CCD cameras and other equipment, and is an accurate and efficient method that can capture even fine cracks.		2014/04/03
patent	203	Social	Distortion correction method	Professor Faculty of Science and Engineering School of Advanced Science and Engineering Department of Applied Physics	In image measurement using digital cameras, this is a method for correcting distortion in camera lens, thereby enabling highly precise shape measurement.		2014/04/03
patent	204	Social	Method of measuring dimension and shape using digital camera	Professor Faculty of Science and Engineering School of Advanced Science and Engineering Department of Applied Physics	In image measurement using digital cameras, this is a method for extracting the measurement points from data of images shot such as the corners of buildings, correcting lens distortion using those coordinate values, and measuring dimensions and shapes.		2014/04/03
patent	1077	Frontier	Photocathode high frequency electron gun, and electron beam equipment equipped with a photocathode high frequency electron gun	Associate Professor Affiliated organization Waseda Institute for Advanced Study	This invention newly installs into the structure of the current photocathode-type high frequency electron gun (RF-Gun) a cavity for compressing the electron beam width and modulates the acceleration phase. There is a bunching effect that can compress the duration of the electron beam, and an electron beam with an ultra-short pulse can be generated.		2014/04/03

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patent	1585	Life sciences	食肉の加熱処理評価法	Professor Faculty of Science and Engineering School of Advanced Science and Engineering	加熱処理によって起こるタンパク質の変性を、ラマン分光分析法を用いて観測し、試料の加熱処理状態を判定する。	特開2016-95230	2016/06/07
patent	1808	Life sciences	皮膚表面 pH の測定法	Senior Research Professor Faculty of Science and Engineering School of Advanced Science and Engineering Department of Applied Chemistry	■動物（ヒト、イヌ、ネコ、サルなど）の皮膚表面の pH を測定する方法。		2016/06/06
patent	1700	Life sciences	高血糖によるエピゲノム異常の抑制剤	Professor Faculty of Science and Engineering School of Advanced Science and Engineering Department of Chemistry and Biochemistry	ヒストンのO-GlcNAc修飾を選択的に定量する方法により高血糖が引起すヒストンO-GlcNAc修飾の異常増加を抑制する化合物を見出し、そのヒストンO-GlcNAc修飾の異常増加の抑制方法及びそのための組成物、修飾の異常増加が関与する疾病に対する予防・治療のための組成物、並びに健康の維持・増進のための方法及び組成物の提供を可能にした。		2015/10/28
patent	1324	Life sciences Information	運動に対する内発的な動機付けを与え、継続的な運動を支援するシステム	Professor Faculty of Science and Engineering	運動を行う使用者に様々な音が提示され、当該音の高低に合わせて使用者が運動を行う。すると、システムでは、音の高低に合った動きか否かを判定し、体の各部位に対して、経験的データから、動きの偏重に応じた重み付けをした上で、使用者に、動きの不足している部位のトレーニングを誘引する。	特許第5988137号	2014/02/18
patent	1614	Information	コンテンツ配信システム及び方法	Professor Faculty of Science and Engineering School of Fundamental Science and Engineering	列車などの交通機関内で乗客の端末がビデオ映像などのコンテンツを要求したとき、映像の頭出しの部分を移動通信などの通信手段でリアルタイムにダウンロードし、残りの部分に対しては列車の次の到着駅のサーバに前もってソースからダウンロードし蓄積しておくことを指示する。次の駅に列車が到着したとき、ミリ波などの近距離高速無線通信技術などを利用して、列車内にダウンロードする。この手順をすべてICN（Information Centric Network／情報指向ネットワーク）技術によって実現する。	2017-117253	2017/07/17
patent	1669	Information	パターン分類装置、パターン分類方法およびパターン分類プログラム	恒雄 新田 客員客員上級研究員・客員教授 GCS研究機構		特開2016-162437	2017/03/06
patent	1851	Information	デュアルクロックを用いた、H. 265のSAO（サンプル適応オフセット）の決定	Professor Faculty of Science and Engineering Graduate School of Information, Production, and Systems			2016/11/02
patent	1613	Information	データ送信システム及び方法	Professor Faculty of Science and Engineering School of Fundamental Science and Engineering		特開2016-158040	2016/11/01
patent	1611	Information	コンテンツ配信システム、ネットワーク装置、及びその作動方法	Guest Senior Researcher Faculty of Science and Engineering Graduate School of Global Information and Telecommunication Studies		特開2016-157200	2016/11/01
patent	1795	Information	ステレオマッチングの処理方法、処理プログラムおよび処理装置	Professor Faculty of Science and Engineering School of Fundamental Science and Engineering Department of Electronic and Photonic Systems			2016/05/12
patent	1735	Information	光変調器	Professor Faculty of Science and Engineering School of Advanced Science and Engineering			2015/12/03



type of seeds	number	field	title	researcher	summary	patent number	posted
patent	1715	Information	動画像検索方法、動画像検索装置及びそのプログラム	Professor (retired) Faculty of Science and Engineering School of Fundamental Science and Engineering Department of Computer Science and Engineering		特開2017-21606	2015/11/03
patent	1610	Information	コンテンツ配信装置、システム、及び方法	Professor Faculty of Science and Engineering Graduate School of Global Information and Telecommunication Studies	コンテンツ配信装置において、連続して転送される一連のデータを一時記憶し、そのデータが再度要求された場合には一時記憶から要求に応答する機能部とデータ再生装置における再生タイミングを制御する機能部を有し、一つのデータが一定時間一時記憶されていることを検出すると、一時記憶から応答するデータの再生タイミングを早め、また上流のサーバから送られてくるデータの場合には再生タイミングを遅らせる機能を有するコンテンツ配信装置。	特開2016-208172	2015/10/21
patent	1359	Information	見るだけで触感が伝わるシステム	Professor Faculty of Science and Engineering School of Fundamental Science and Engineering Department of Intermedia Art and Science	仮想物体の立体映像と、ユーザの身体部位との重畳表示を行うことで、視覚によって「触錯覚（実際には触れていないのに触覚を感じる）」を誘発する、触錯覚呈示装置。ヒトの認知特性である、視覚と触覚という異なる感覚間の相互作用（クロスモーダル）を利用している。	特開2014-71546	2014/05/14
patent	1335	Information	記憶度推定装置および記憶度推定プログラム	Professor Faculty of Science and Engineering School of Fundamental Science and Engineering Department of Computer Science and Engineering	ユーザが入力画面に解答を手書き入力する際に、入力開始までの時間や解答終了までの書き直し（消去字画数）等の所定の特徴量を取得し、統計処理を用いて一般ユーザの記憶度に基づく特徴量の傾向との比較を行い、比較結果を基にユーザが解答を完全に記憶しているか、迷いながら正解したか等を判定することで、ユーザの記憶度を推定する。	特許第6032638号	2014/03/26
patent	409	Information	乗算剰余演算器及び情報処理装置	Professor (retired) Faculty of Science and Engineering Graduate School of Information, Production, and Systems	近年のBtoB、BtoC等の電子商取引の拡大に伴い、高い秘匿性の点で注目される公開鍵暗号方式において、暗号化及び復号化のために実行される乗算剰余演算（複数ビット法に基づく）を行う方式に関する技術。従来技術の課題であった乗算剰余演算に要する演算時間を短縮すると共に、回路規模の大幅な削減を実現できる技術を提供する。本発明によって、携帯電話機、PDA、パーソナルコンピュータやサーバ装置等の近年の情報処理装置の普及に伴ってニーズの高まる、処理性能が高く、かつ低コストなLSI製品が実現可能となる。	第4170267号	2013/12/25
patent	1334	Environment Social	高感度コンプトンカメラ	Professor Faculty of Science and Engineering School of Advanced Science and Engineering Department of Applied Physics	高感度で容易に携帯可能なガンマ線撮影用のコンプトンカメラです。	特許第5991519号	2014/06/19
patent	1102	Environment Social	アルミニウム合金選別システム	Professor Faculty of Science and Engineering School of Creative Science and Engineering	合金系別にアルミニウム合金を判別し回収出来るシステムです。アルミニウムあるいはアルミニウム合金は、省資源化と低コスト化の観点からリサイクルされています。迅速かつ大量にアルミニウムおよびアルミニウム合金を他の金属から選別して回収する中で、アルミニウム合金は添加される金属ごとに合金種が異なり、その用途も異なるために合金系別にアルミニウム合金の判別そして回収が必要です。	第5562193号	2014/06/18
patent	149JP	Environment	重金属不溶化剤	淳司 山崎 教授 理工学術院 創造理工学部 環境資源工学科	天然鉱物由来の新しい重金属溶出抑制剤、還元機能を有する為、6価クロム、砒素、セレンなどの溶出抑制にも利用できる。	第5697334号	2014/06/10
patent	59JP	Environment Nanotechnology / Materials	NLDHによる高度陰イオン吸着システム	淳司 山崎 教授 創造理工学部 環境資源工学科	NLDHは層状複水酸化物（ハイドロタルサイト：LDH）の一種ですが、結晶子をナノサイズに調製することで陰イオンの交換性能を飛躍的に向上させた新材料です。通常のイオン交換樹脂が有機の高分子化合物であるのに対し、NLDHは無機化合物であり、環境にもやさしく安全です。ヒメダカ、マウス試験による安全性確認済です。	第4036237号	2014/06/10
patent	1756	Nanotechnology / Materials	集積回路の正常化方法、正常化回路、及び集積回路	Professor Faculty of Science and Engineering School of Fundamental Science and Engineering		2017-146777	2017/09/21
patent	1944	Nanotechnology / Materials	物体マーキング用高分子薄膜およびその製造方法、物体測定キット、物体の測定方法	Assistant Professor Faculty of Science and Engineering School of Advanced Science and Engineering			2017/07/31

type of seeds	number	field	title	researcher	summary	patent number	posted
patent	1901	Nanotechnology / Materials	ノーマリーオフ動作ダイヤモンド電力素子及びこれを用いたインバータ	Professor Faculty of Science and Engineering School of Fundamental Science and Engineering			2017/06/23
patent	1931	Nanotechnology / Materials	組電池、電池モジュールおよび電池モジュールの評価方法	Senior Research Professor Faculty of Science and Engineering School of Advanced Science and Engineering Department of Applied Chemistry			2017/06/23
patent	1923	Nanotechnology / Materials	トランス及び該トランスを用いたレクテナ	Associate Professor Faculty of Science and Engineering School of Advanced Science and Engineering			2017/06/23
patent	1936	Nanotechnology / Materials	半導体センシングデバイス	Senior Research Professor Faculty of Science and Engineering School of Advanced Science and Engineering Department of Applied Chemistry			2017/06/23
patent	1871	Nanotechnology / Materials	パワー半導体モジュール装置及びル製造方法	Professor Faculty of Science and Engineering Graduate School of Information, Production, and Systems			2017/06/16
patent	1843	Nanotechnology / Materials	トランジスタの製造方法及びセンサ素子	Professor Faculty of Science and Engineering School of Fundamental Science and Engineering		特開2016-178342	2017/03/06
patent	1659	Nanotechnology / Materials	カーボンナノチューブの製造装置	Professor Faculty of Science and Engineering School of Advanced Science and Engineering		特開2016-153353	2017/03/06
patent	1624	Nanotechnology / Materials	金属材料の接合方法	Research Council (Research Organization) Institute for Nanoscience & Nanotechnology		特開2016-107290	2017/03/06
patent	1618	Nanotechnology / Materials	テーパ光ファイバの製造方法	Professor Faculty of Science and Engineering School of Advanced Science and Engineering		特開2016-153850	2017/03/06
patent	1604	Nanotechnology / Materials	ナノカーボン基材の製造方法およびナノカーボン基材	Professor Faculty of Science and Engineering School of Fundamental Science and Engineering		特開2016-141604	2017/03/06
patent	1687	Nanotechnology / Materials	抗微生物活性を有するコラーゲン様ペプチド及びその組成物	Professor Faculty of Science and Engineering School of Advanced Science and Engineering Department of Chemistry and Biochemistry	塩基性と三重らせん構造をもち、塩基性残基と疎水性残基の種類を変えることにより、強い抗微生物活性を有するように調製されるコラーゲン様ペプチド。ヒト線維芽細胞に対する毒性試験、ヒト赤血球に対する溶血性試験、マウスの急性毒性試験において、安全性が確認できている。	特開2017-14126	2017/02/13
patent	1827	Nanotechnology / Materials	曲げ変形および伸縮変形可能な電子デバイス	Associate Professor Faculty of Science and Engineering School of Fundamental Science and Engineering			2016/07/05

type of seeds	number	field	title	researcher	summary	patent number	posted
patent	1828	Nanotechnology / Materials	視覚的質感提示デバイスおよび視覚的質感提示方法	Associate Professor Faculty of Science and Engineering School of Fundamental Science and Engineering			2016/07/05
patent	1782	Nanotechnology / Materials	電力素子	Professor Faculty of Science and Engineering School of Fundamental Science and Engineering		特開2016-157932	2016/04/08
patent	1737	Nanotechnology / Materials	近接場分光顕微装置	Professor Faculty of Science and Engineering School of Advanced Science and Engineering	◆ナノメートルの空間分解能で試料の分光特性評価が可能◆単一波長での測定に限定されていた反射観察を多波長に拡張◆「位相ステップング法」により広帯域かつ高精度の分光測定を実現◆測定対象が不透明なものでも測定可能に	2017-58281	2015/11/03
patent	1390	Nanotechnology / Materials	リチウム二次電池活物質	Senior Research Professor Faculty of Science and Engineering School of Advanced Science and Engineering Department of Applied Chemistry	充放電サイクル特製の良いリチウム二次電池活物質の製造方法を提供する。	特開2014-135239	2015/03/11
patent	1379	Nanotechnology / Materials	電気めっき液、リチウム二次電池用活物質の製造方法、及びリチウム二次電池	Senior Research Professor Faculty of Science and Engineering School of Advanced Science and Engineering Department of Applied Chemistry	充放電サイクル特性の良いリチウム二次電池用活物質を安定して成膜できる電気めっき液を提供する。	登録第6057208号	2015/03/11
patent	1729	Energy	海洋鉱物資源の調査装置	Professor Faculty of Science and Engineering School of Creative Science and Engineering	海底下の金属鉱物資源を電磁探索する装置である。		2015/10/23
patent	1910	Manufacturing Technology	羽ばたき型飛行機	Professor Faculty of Science and Engineering School of Fundamental Science and Engineering Department of Electronic and Photonic Systems			2017/06/23
patent	1736	Manufacturing Technology	多結晶ダイヤモンド上のパワーMOSFET（ダイヤモンド電界効果トランジスタ及びその製造方法）	Professor Faculty of Science and Engineering School of Fundamental Science and Engineering	◆多結晶ダイヤモンド（黒い）上にMOSFETを作製 ◆顕著な変調・良好なデバイス特性◆逆阻止耐圧1800Vを達成	2017-45897	2015/11/03
patent	1732	Manufacturing Technology	大強度広帯域テラヘルツ波発生手法（電磁波発生装置及びその方法）	Associate Professor Affiliated organization Waseda Institute for Advanced Study	◆電子線による高強度広帯域テラヘルツ波発生◆電子線の傾きの利用により高効率化を実現◆広帯域性を有し、テラヘルツ分光などに有効◆テラヘルツカメラにも応答する高強度性	特開2017-54699	2015/11/03
patent	1913	Social	能動的接触力調整エンドエフェクタ	Assistant Professor Faculty of Science and Engineering			2017/06/20
patent	1912	Social	停電時の安全性を持つ可変トルクリミッタ	Associate Professor Faculty of Science and Engineering Graduate School of Creative Science and Engineering			2017/06/20
patent	1911	Social	可変トルクリミッタアクチュエータの制御システム	Associate Professor Faculty of Science and Engineering Graduate School of Creative Science and Engineering			2017/06/20

type of seeds	number	field	title	researcher	summary	patent number	posted
patent	1616	Social	MR流体を用いたバックドライバブルアクチュエータ	Faculty of Science and Engineering Waseda Research Institute for Science and Engineering	高応答・高出力・安全性が求められる次世代のロボットシステムには、予期しない外力の付与に対して迅速に応答可能な柔軟性を有する新たなアクチュエータが要請されている。本シーズは、応答時間の短縮化を図るとともに、比較的簡易な構成で柔軟性を発揮させることができるバックドライバブルアクチュエータを提供することにある。	特開2016-142320	2017/02/20
patent	1879	Social	指先用の3軸力センサ	Associate Professor Faculty of Science and Engineering Graduate School of Creative Science and Engineering			2017/02/09
patent	1872	Social	回転型コンプライアントアクチュエータ	Faculty of Science and Engineering Waseda Research Institute for Science and Engineering			2016/12/06
patent	1846	Social	ロボット用 マルチモーダルセンサ	Associate Professor Faculty of Science and Engineering Graduate School of Creative Science and Engineering			2016/09/07
patent	1836	Social	生体軟組織のレオロジー特性物性値測定による、筋肉内脂肪の質の測定	Researcher (retired) Faculty of Science and Engineering Waseda Research Institute for Science and Engineering			2016/07/05
patent	1805	Social	山林内における路網の自動生成から施業計画作成に関わる一連の技術、手法	Guest Professor Faculty of Science and Engineering Graduate School of Creative Science and Engineering			2016/06/08
patent	1804	Social	歯磨きロボット	Professor Faculty of Science and Engineering			2016/04/11
patent	1569	Social	創造的人工脳	Professor Faculty of Science and Engineering School of Fundamental Science and Engineering	従来型コンピュータは将棋チェスをするものや入試問題を解くものも含めてどれも、決められた仕事を早くこなすためのものであった。ヒトのようなアイデアを出せる人工知能を目指す第一歩として、ヒトの脳の神経細胞群の結合様式（空間パターン）を実験的に解明する研究が進められているが不明であった。そこで、化学反応論と分子生物学のデータを体系的に分析したところ、その解明ができた。	特開2016-24637	2016/03/18
patent	1551	Social	金属き裂の自己治癒方法	Associate Professor Faculty of Science and Engineering School of Fundamental Science and Engineering	本技術は、金属を真空中で加熱すると、ある一定の温度で酸化被膜が消失することに着目し、き裂表面の酸化被膜が消失した状態で、急冷することにより材料内部に生じる熱圧縮応力を付与させて、き裂を閉口させる。	特開2016-16499	2016/03/18
patent	1556	Social	半側空間無視の注意再獲得支援システム	Professor Faculty of Science and Engineering	半側空間無視患者に対するリハビリテーションを支援するためのシステムであり、訓練用画像内の一部領域のみを視認可能にするスリット領域を移動、拡大させるように訓練者に提示することで、訓練者の訓練用画像に対する注意部分を移動させる。これにより、訓練者は、「固定」、「解放」、「移動」の各能力を増進させることが可能になる。	特開2015-221185	2016/01/06
patent	1552	Social	静的ストレッチングの評価システム	Professor (retired) Faculty of Science and Engineering School of Creative Science and Engineering Department of Modern Mechanical Engineering	筋を伸張しながら所定の身体部分を一定姿勢で維持する場合には、当該身体部分の筋部位について、応力緩和の影響を除外し、筋粘弾性の継時的変化のみから、筋部位の継時的な状態変化を検出するシステムである。	特開2015-221122	2016/01/06
patent	1761	Social	ロボット制御装置	Professor (retired) Faculty of Science and Engineering School of Creative Science and Engineering Department of Modern Mechanical Engineering			2015/12/10

type of seeds	number	field	title	researcher	summary	patent number	posted
patent	1749	Social	血液濾過器の流れの可視化試験装置	Professor Faculty of Science and Engineering Graduate School of Advanced Science and Engineering Cooperative Major in Advanced Biomedical Sciences			2015/11/05
patent	1488	Social	分散設置型インタラクティブ運動支援システム	Professor Faculty of Science and Engineering	参加者の運動を運動中に評価し、適切さについてのフィードバックを複数の画像などの感覚情報として与えることにより、参加者が運動の不適切さに気づき、自身で適切な運動を形作っていけるように誘引するシステム	特開2015-100458	2015/07/10
patent	110	Social Manufacturing Technology	木質改質剤	Guest Professor (retired)	木材本来の長所は生かし、寸法の狂い、吸水性、燃えやすさ等の欠点を改質する薬剤です。	第3992899号	2014/06/12

<b>Contact</b>	<b>WASEDA UNIVERSITY Research Collaboration and Promotion Center</b> Room No.201, Building No.120-4 WASEDA UNIVERSITY Research Development Center, 513, Tsurumakicho, Shinjuku-ku, Tokyo, 162-0041, Japan TEL : 03-5286-9867 FAX : 03-5286-8374 E-mail : contact-tlo@list.waseda.jp URL : <a href="http://www.waseda.jp/tlo/">http://www.waseda.jp/tlo/</a>
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