

Patent Selections

The patents annotated in this section have been selected from various patent databases. These recent patents are relevant to the articles published in this journal issue, categorized by the processes and technologies related to various disciplines of engineering sciences.

PERFORMANCE OPTIMIZATION

1. H. Zhenhua, M. Hao Hai, T. Wentao, and X. Qiang, "Optimization of Map-Reduce Shuffle Performance Through Shuffler I/O Pipeline Actions and Planning", U.S. Patent 2016283282, 2016.
2. N. A. Siu-Chung, D. Long, S. Salil, L. Z. Tao, Peng Jianming, Zhou Guiyin, Sahin Mustafa, and Mei Liang, "Apparatus and Methods for Network Counter Based Performance Tuning and IRAT Parameter Optimization", WO Patent 2016141569, 2016.

STAIRWELL

1. Z. Yun, D. Xuesong, and L. Dezhang, "An Energy Dissipation Shock Attenuation Stairwell Structure for Frame Construction", CN Patent 205206076, 2016.
2. S. Yan, "Can Be in Medical Shallow of Stairwell Walking", CN Patent 205286737, 2016.

BUOYANCY FORCE

1. S. Ali, "Mechanism for Hydropower Generating System using Buoyancy Energy/Force", U.S. Patent 2016281676, 2016.
2. S. Bizjak, "Pushers of the Hydraulic Lever or Generator of Linear Movement by Use of Buoyancy Force and Pumping of Liquids by a Vacuum", SI Patent I24931, 2016.

CEILING JET

1. W. Ralf, "Air Duct Assembly for a Ceiling Jet Outlet and Method", EP Patent 2975332, 2016.
2. L. Fuzhong, "Household Ceiling Fan Provided with Spray Nozzles", CN Patent 104675725, 2016.

2 ULTRA WIDEBAND ANTENNAS

1. C. Chi-Chih, J. L. Volakis, and Y. Ersin, "Multiple-Input Multiple-Output Ultra-Wideband Antennas", U.S. Patent 2015357720, 2016.
2. O. R. Ouatagom, P. Eric, M. Jeremy, T. T. Addison, C. Christopher, and C.O. Bozler, "Miniature Ultra-Wideband Multifunctional Antennas and Related Techniques", WO Patent 2016044208, 2016.

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2. S. Ronen, and T. Yuva, "Multi-Band Monopole Planar Antennas Configured to Facilitate Improved Radio Frequency (RF) Isolation in Multiple-Input Multiple-Output (Mimo) Antenna Arrangement", WO Patent 2016071902, 2016.

OMNIDIRECTIONAL RADIATION

1. D. Claudia, and S. Manfred, "Broadband Omnidirectional Antenna", U.S. Patent 2016164190, 2016.
2. L. Ronglin, and L. Peng, "Knife-Shaped Dual-Frequency Horizontal Polarization Omnidirectional Antenna", CN Patent 105449357, 2016.

GENETIC ALGORITHM

1. S. P. Krishnan, F. Eugen, and F. Julien, "Method and System To Rebalance Constrained Services in a Cloud Using a Genetic Algorithm", U.S. Patent 2016226789, 2016.
2. S. Aiguo, L. Ang, L. Huijun, Z. Qiang, L. Mingxin, and X. Baoguo, "Multi-Dimensional Force Sensor Calibration Experiment Data Fitting Method Based on Genetic Algorithm", CN Patent 105651457, 2016.

UNMANNED AERIAL VEHICLES

1. H. Christopher, R. Andreas, L. Kendall, and B. Ido, "Route Planning for Unmanned Aerial Vehicles", WO Patent 2016154551, 2016.
2. D. Jonathan, M. J. Bernard, and R. Brian, "Distributed Unmanned Aerial Vehicle Architecture", U.S. Patent 2016285774, 2016.

GEOGRAPHICAL MAPPING

1. J.T. McConnell, and T. Steven, "Geographical Intrusion Response Prioritization Mapping through Authentication and Flight Data Correlation", U.S. Patent 2016226891, 2016.
2. S. Eugene, and A. Steven, "Systems and Methods for Geographical Ticker of Health Related Savings Account Transactions", U.S. Patent 2016232635, 2016.

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1. W. Cheng, Y. Xicheng, X. Ying, G. Bo, and W. Chao, "Power Industry on-Site Inspection Method Based on Smart Phone", CN Patent 105678856, 2016.
2. S. Richard, M. Douglas, M. Mark, F.W. Stankey, Y. Scott, and S. Christopher, "Inspection Site Preparation", TW Patent 201618151, 2016.

MULTI-ROTOR

1. M. J. Antoine, "Multi-Rotor Personal Air Vehicle with a Central Lifting Fan", WO Patent 2016153580, 2016.
2. S. D. Spriggs, "Multi-Rotor Wind Turbine", U.S. Patent 2016281677, 2016.

ENERGY CONSERVATION

1. R.D. Wells, S.S. Jahagirdar, I.M. Sodhi, Shrall Jeremy J, Gunther Stephen H, Ragland Daniel J, and Adams Nicholas J, “System, Method and Apparatus for Energy Efficiency and Energy Conservation by Configuring Power Management Parameters during Run Time”, U.S. Patent 2016282919, 2016.
2. Z. Xijun, Z. Yigao, and D. Xilong, “Interior Activation Flow Aiding Device for Energy Conservation and Environmental Protection Type Warehousing Equipment”, CN Patent 105668055, 2016.

LOCALIZED RECOGNITION

1. S. Ethan, M.J. Johnston, and S. Svetlana, “System and Method for Localized Error Detection of Recognition Results”, U.S. Patent 2016155445, 2016.
2. C. Lai-Kwan, W. Chin-Wei, C. Chang-Yue, and C. Chien-Hsing, “Self-Referencing Localized Plasmon Resonance Sensing Device and System Thereof”, U.S. Patent 2016169797, 2016.

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2. Z. Jiqiang, W. Lifeng, Z. Xiaoyong, F. Yu, Z. Yousheng, and X. Wangting, “Unmanned Mowing Vehicle Outdoor Navigation and Control Method Based On GPS-RTK Technology”, CN Patent 105716619, 2016.

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2. F. A. Michael, R. M. Lee, M. Yoky, and S. David, “HVAC Control System with Interchangeable Control Units”, U.S. Patent 2016161138, 2016.

CYLINDRICAL SPECIMEN

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2. N. Koichi, K. Koichi, and K. Hideki, “Nozzle Cap for Specimen Test Container, and Specimen Test Container and Specimen Test Kit Using Same”, WO Patent 2016031899, 2016.

ERROR ANALYSIS

1. G.S. Dhamal, S. Premnath, and M. Mahesh, “Path Selection Based on Error Analysis”, U.S. Patent 2016269278, 2016.
2. G. Renat, A.G. Gounares, and C.W. Fraser, “Error List and Bug Report Analysis for Configuring an Application Tracer”, U.S. Patent 2016266998, 2016.

RADIAL DEFORMATION

1. C. Yijian, Z. Luning, and C. Xingyu, “Device for Measuring Radial Deformation of Rock Sample”, CN Patent 105651613, 2016.
2. O. I. Azarevich, and S. A. Igorevich, “Method of Treating Posttraumatic Deformation of Distal Radial Bone, Combined With Contractures of Wrist Joint and Joints of Forearm”, RU Patent 2585424, 2016.

ANALOGUE MATERIALS

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2. R. Ryong, P. W. Jin, and C. C. Bum, “Organic Surfactant for Manufacturing Zeolite Materials and their Analogue Materials Comprising Mesopore and Producing Method Thereof”, KR Patent 20150102542, 2016.

BREAST INTERVENTION

1. K.O. Ivanovich, S.J. Sergeevna, N.I.A. Dovna, B. A. Vladimirovich, N. E. Alekseevna, and G.V. Mikhajlovna, “Method of Treating Early Breast Cancer”, RU Patent 2554749, 2016.

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1. R.-D. Jonathan, and R.E. Hollingsworth, “Therapeutic Combinations and Methods for Treating Neoplasia”, TW Patent 201625270, 2016.
2. H. Simon, and B.T. Simon, “Therapeutic Combinations and Methods for Treating Neoplasia”, TW Patent 201622726, 2016.

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1. Z. Chao, Z. Yaozu, L. Xin, and Z. Hairong, “Magnetic Resonance Imaging Method and Device”, WO Patent 2016149888, 2016.
2. P. Hyun-Wook, and S. Hyun-Seok, “Magnetic Resonance Imaging (Mri) Apparatus and Method of Generating MR Image”, U.S. Patent 2016282437, 2016.

COMPUTED TOMOGRAPHY

1. J.D. Kirk, R.W. Filiberti, O. Markus, and P.A.P. Laurence, “Cone-Beam Computed Tomography Imaging Devices, Systems, and Methods”, U.S. Patent 2016278719, 2016.
2. W. Lihong, H. Bin, X. Jun, M. Konstantin, and A. Mark, “Photoacoustic Computed Tomography with an Acoustic Reflector”, U.S. Patent 2016262628, 2016.

WATER ELECTROLYSIS

1. R.A.M. Gomez, “A Diaphragm Type Electrolytic Cell and a Process for the Production of Hydrogen from Unipolar Electrolysis of Water”, U.S. Patent 2016281243, 2016.

2. Z. Bo, W. Le, Y. Cenyu, X. Yu, and Z. Pengcheng, “Solar Optothermal Coupled High-Temperature Water Electrolysis Hydrogen Production System”, WO Patent 2016150168, 2016.

HYDROGEN PRODUCTION

1. H. Kazuki, and T. Yutaro, “Production Method for Epoxy Compound Containing Stabilizer for Hydrogen Peroxide”, TW Patent 201623267, 2016.
2. G.R.M. Antonio, “A Diaphragm Type Electrolytic Cell and a Process for the Production of Hydrogen from Unipolar Electrolysis of Water”, U.S. Patent 2016281243, 2016.

ALKALINE ELECTROLYSIS

1. S. Yusuke, N. Kenji, T. Hidefumi, and F. Norikazu, “Diaphragm for Alkaline Water Electrolysis, Alkaline Water

Electrolysis Apparatus, Method for Producing Hydrogen, and Method for Producing Diaphragm for Alkaline Water Electrolysis”, WO Patent 2016148302, 2016.

2. Y. Yugen, and D. Shuhua, “Alkaline Electrolysis Fluid Recovery Unit”, CN Patent 205355201, 2016.

SOLID POLYMER ELECTROLYSIS

1. S. Yoshitsugu, S. Masato, S. Asuka, U. Minoru, N. Tetsuya, S. Ryota, and K. Toru, “Solid Polymer Power Generation or Electrolysis Method and System”, U.S. Patent 2016226090, 2016.
2. H. Mami, W. Nobuaki, G. Hirofumi, T. Keisuke, and M. Kazuya, “Solid Polymer Electrolyte Membrane, Membrane-Electrode Conjugant, Fuel Cell, Water Electrolysis Cell and Water Electrolytic Device”, JP Patent 2016119230, 2016.