

Major Patents

■ Patents registered in 2017

Registration Number	Name	Inventor(s)
Patent 6163037	Terminating Resistor Connector	Koichi Machida
Patent 6074346	Switchboard Apparatus	Yuzo Kubota
Patent 6082689	Isolated Operation Detector and Method of Detecting Isolated Operation	Hiroyuki Hanaoka, Akihiro Tsukada, Kazuya Nishizawa
Patent 6109050	Parallel-Off Controller, Method of Controlling Parallel-Off and Power Conditioner	Hiroyuki Hanaoka, Akihiro Tsukada, Kazuya Nishizawa
Patent 6190550	Linear Motor and Magnetic Shielding Structure for Linear Motor	Yu Qi Tang
Patent 6128872	POWER TRANSMISSION DEVICE	Satoshi Sugita, Yu Qi Tang, Yasushi Misawa, Shigenori Miyairi
Patent 6125267	INTERIOR MAGNET LINEAR INDUCTION MOTOR	Satoshi Sugita, Yu Qi Tang, Yasushi Misawa, Shigenori Miyairi
Patent 6117574	INDUCTOR TYPE ROTARY MOTOR	Satoshi Sugita, Yu Qi Tang, Yasushi Misawa, Shigenori Miyairi
Patent 6118157	MOTOR SPEED CONTROL APPARATUS	Yuji Ide, Satoshi Yamazaki
Patent 6166926	LINEAR MOTOR	Yu Qi Tang, Satoshi Sugita
Patent 6082646	SHAFT ROTARY TYPE LINEAR MOTOR AND SHAFT ROTARY TYPE LINEAR MOTOR UNIT	Yu Qi Tang, Satoshi Sugita
Patent 6207870	FAN MOTOR	Naruhiko Kudo, Munenori Takakuwa, Tatsuya Midorikawa
Patent 6140037	POWER CONVERTER	Minoru Yanagisawa
Patent 6106568	POWER CONVERTER	Masahiko Nagai
Patent 6131144	WINDING INSULATION STRUCTURE OF STATOR OF ELECTROMAGNETIC MOTOR	Kazuhiro Yoda, Masaaki Ohashi, Shogo Yoda
Patent 6140035	THREE-PHASE ELECTROMAGNETIC MOTOR	Toshihito Miyashita, Manabu Horiuchi
Patent 6104134	HOUSING OF FAN MOTOR	Toshiya Nishizawa, Haruka Sakai, Jiro Watanabe, Masashi Yokota
Patent 6154704	CONTROL DEVICE OF FAN MOTOR	Takahisa Toda, Takashi Kaise, Jiro Watanabe
Patent 6106582	MOTOR CONTROLLER	Yuji Ide, Michio Kitahara, Satoshi Yamazaki
Patent 6126984	WATERPROOF AXIAL FLOW FAN	Katsumichi Ishihara, Akira Nakayama, Tatsuya Midorikawa, Masato Kakeyama
Patent 6204847	GROUND WIRE CONNECTION STRUCTURE FOR MOTOR	Toshihito Miyashita, Manabu Horiuchi
Patent 6093817	MOTOR CONTROL DEVICE	Yuji Ide, Satoshi Yamazaki, Masahisa Koyama
EP Patent 2091131	MOTOR ROTOR AND MANUFACTURING METHOD THEREOF	Toshihito Miyashita, Takashi Matsushita, Norihito Tanaka
EP Patent 2508760	COUNTER-ROTATING AXIAL FLOW FAN	Atsushi Yanagisawa, Honami Osawa
EP Patent 2916109	MAGNETIC SHIELD COVER FOR ENCODER OF MAGNETIC DETECTION TYPE AND ENCODER OF MAGNETIC DETECTION TYPE	Kazuhiro Makiuchi, Yoshihiro Shoji
EP Patent 2439415	LEAD WIRE ENGAGING STRUCTURE AND ELECTRIC APPARATUS	Yen Junchieh, Jiro Watanabe, Hiromitsu Kuribayashi, Shigekazu Mitomo
U.S. Patent 9613740	MOVING MAGNETIC FIELD GENERATING APPARATUS	Satoshi Sugita, Yasushi Misawa, Yu Qi Tang, Shigenori Miyairi
U.S. Patent 9581174	FAN FRAME	Masahiro Koike, Soma Araki, Toshiki Ogawara
U.S. Patent 9714659	AXIAL FLOW FAN	Naoya Inada, Jiro Watanabe
U.S. Patent 9660490	PERMANENT MAGNET TYPE MOTOR AND METHOD FOR MANUFACTURING PERMANENT MAGNET TYPE MOTOR	Toshihito Miyashita, Manabu Horiuchi
U.S. Patent 9634534	BRUSHLESS MOTOR	Yoshinori Miyabara, Haruhisa Maruyama, Kei Sato, Haruka Sakai
U.S. Patent 9601956	THREE-PHASE PERMANENT MAGNET TYPE MOTOR	Toshihito Miyashita, Masahiro Yamaguchi
U.S. Patent 9551345	AXIAL FLOW FAN	Atsushi Yanagisawa
U.S. Patent 9614405	WIRING STRUCTURE OF STATOR COIL	Yukio Miura, Masaaki Ohashi, Koji Nakatake
U.S. Patent 9742258	ROTATIONAL-LINEAR MOTION CONVERTER	Satoshi Sugita, Yu Qi Tang, Yasushi Misawa, Shigenori Miyairi
U.S. Patent 9712030	SHAFT ROTARY TYPE LINEAR MOTOR AND SHAFT ROTARY TYPE LINEAR MOTOR UNIT	Yu Qi Tang, Satoshi Sugita
U.S. Patent 9748814	ASSEMBLY METHOD OF AN INLINE TYPE FAN MOTOR	Katsumichi Ishihara, Masashi Nomura, Tomoko Hayashi

Registration Number	Name	Inventor(s)
U.S. Patent 9837884	Multi-phase Linear Motor with Continuously Wound Coils in Each Phase	Yu Qi Tang, Takashi Matsushita
U.S. Patent 9853530	LINEAR MOTOR UNIT	Yu Qi Tang, Kazuhito Yamaura
U.S. Patent 9698634	STATOR CORE AND PERMANENT MAGNET MOTOR	Toshihito Miyashita, Manabu Horiuchi
U.S. Patent 9742245	GROUND WIRE CONNECTION STRUCTURE FOR MOTOR	Toshihito Miyashita, Manabu Horiuchi
U.S. Patent 9705385	PRODUCT SPECIFICATION SETTING APPARATUS AND FAN MOTOR HAVING THE SAME	Tetsuya Yamazaki, Takahisa Toda
Korea Patent 10-1767527	LINEAR SYNCHRONOUS MOTOR	Yu Qi Tang, Satoshi Sugita
Korea Patent 10-1778119	ELECTRIC FAN	Naruhiko Kudo, Tomoaki Ikeda, Haruhisa Maruyama
Korea Patent 10-1738670	MOTOR CONTROLLER	Yuji Ide, Satoshi Yamazaki
Korea Patent 10-1788772	MOTOR CONTROLLER	Toshiyuki Nakamura, Yo Muramatsu
Korea Patent 10-1807787	MOTOR CONTROLLER	Yuji Ide
Korea Patent 10-1810638	MOTOR CONTROL SYSTEM INCLUDING ELECTRICAL INSULATION DETERIORATION DETECTING SYSTEM	Yuji Ide
Korea Patent 10-1810639	MOTOR CONTROL SYSTEM INCLUDING ELECTRICAL INSULATION DETERIORATION DETECTING SYSTEM	Yuji Ide, Masahisa Koyama, Yoshihisa Kubota
Korea Patent 10-1799957	MOTOR CONTROLLER	Yuji Ide, Satoshi Yamazaki
Korea Patent 10-1799544	MOTOR CONTROLLER	Yuji Ide, Masakazu Sakai
Korea Patent 10-1724646	MOTOR CONTROLLER	Yuji Ide
Taiwan Patent I565217	MOTOR CONTROLLER	Yuji Ide, Masakazu Sakai
Taiwan Patent I581556	MOTOR CONTROLLER	Yuji Ide, Satoshi Yamazaki
Taiwan Patent I594566	MOTOR CONTROLLER	Toshiyuki Nakamura, Yo Muramatsu
Taiwan Patent I606675	SPLIT-CORE TYPE MOTOR AND METHOD OF MANUFACTURING ARMATURE OF SPLIT-CORE TYPE MOTOR	Toru Takeda, Shintaro Koichi, Kenta Matsushashi
Taiwan Patent I575863	MOTOR CONTROLLER	Yuji Ide
Taiwan Patent I594565	MOTOR CONTROLLER	Takahisa Toda
Taiwan Patent I596868	PERMANENT MAGNET TYPE MOTOR AND METHOD FOR MANUFACTURING PERMANENT MAGNET TYPE MOTOR	Toshihito Miyashita, Manabu Horiuchi
Taiwan Patent I584573	MOTOR CONTROL SYSTEM INCLUDING ELECTRICAL INSULATION DETERIORATION DETECTING SYSTEM	Yuji Ide
Taiwan Patent I582446	MOTOR CONTROL SYSTEM INCLUDING ELECTRICAL INSULATION DETERIORATION DETECTING SYSTEM	Yuji Ide, Masahisa Koyama, Yoshihisa Kubota
Taiwan Patent I600269	MOTOR CONTROL DEVICE AND MOTOR CONTROL METHOD	Yo Muramatsu, Takahisa Toda
Taiwan Patent I593215	THREE-PHASE PERMANENT MAGNET TYPE MOTOR	Toshihito Miyashita, Masahiro Yamaguchi
Taiwan Patent I583104	PERMANENT MAGNET-EMBEDDED MOTOR AND ROTOR THEREOF	Toshihito Miyashita
Taiwan Patent I589782	AXIAL FLOW FAN	Atsushi Yanagisawa
Taiwan Patent I568169	MOTOR CONTROLLER	Yuji Ide, Satoshi Yamazaki
Taiwan Patent I604683	WIRING STRUCTURE OF STATOR COIL	Yukio Miura, Masaaki Ohashi, Koji Nakatake
Taiwan Patent I597931	MOTOR CONTROLLER	Yuji Ide, Shunichi Miyazaki
China Patent ZL201310342099.9	PERMANENT MAGNET TYPE MOTOR AND METHOD FOR MANUFACTURING PERMANENT MAGNET TYPE MOTOR	Toshihito Miyashita, Manabu Horiuchi
China Patent ZL201310325466.4	MOTOR CONTROL SYSTEM INCLUDING ELECTRICAL INSULATION DETERIORATION DETECTING SYSTEM	Yuji Ide
China Patent ZL201310325069.7	MOTOR CONTROL SYSTEM INCLUDING ELECTRICAL INSULATION DETERIORATION DETECTING SYSTEM	Yuji Ide, Masahisa Koyama, Yoshihisa Kubota
China Patent ZL201310464531.1	THREE-PHASE PERMANENT MAGNET TYPE MOTOR	Toshihito Miyashita, Masahiro Yamaguchi
China Patent ZL201310397858.1	AXIAL FLOW FAN	Atsushi Yanagisawa
China Patent ZL201310425260.9	MOTOR CONTROLLER	Yuji Ide, Satoshi Yamazaki
China Patent ZL201310606923.7	POWER LINE CONNECTING STRUCTURE OF STATOR	Yukio Miura, Kazuyoshi Uchiyama, Kazuhiro Yoda
China Patent ZL201410167990.8	SHAFT ROTARY TYPE LINEAR MOTOR AND SHAFT ROTARY TYPE LINEAR MOTOR UNIT	Yu Qi Tang, Satoshi Sugita
China Patent ZL201310031221.0	MOTOR CONTROL DEVICE AND CONTROL METHOD OF THE SAME	Noriaki Taniguchi, Takahisa Toda, Yo Muramatsu
China Patent ZL201310159567.9	FAN FRAME	Masahiro Koike, Soma Araki, Toshiki Ogawara