

## Main Patents

### Patents registered in 2002

Registration Number	Title	Inventors
3288531	Stator for Rotation Electrical Machine	Kazuyuki Kitazawa
3293737	Stator for Rotation Electrical Machine and Its Manufacturing Method	Shigeto Murata, Masahiro Koyama, Yutaka Takeuchi
3297592	Circuit Board with Connector	Shouji Ito, Hideyuki Ishii, Sakae Kishi
3304268	Transformer	Hidetoshi Kobayashi, Shinichi Morita
3323716	Manufacturing Method of Stator for Rotation Electrical Machine and Stator for Rotation Electrical Machine	Keizou Watanabe, Kazuyuki Kitazawa, Hiroshi Ooki
3330232	AC/DC Uninterruptible Power Supply	Yoshihiro Sekino, Muneo Suita
3345559	High Division Encoder Device	Hideyuki Ishii, Shigeharu Katou, Takatoshi Sakuma, Tomoharu Sekine, Shouji Ito
3349343	Photoelectric Type Encoder	Shouji Ito, Hideyuki Ishii, Sakae Kishi, Yoshihiro Satou
3360023	Linear/Rotation Actuator and Winding Machine Equipped with Actuator	Kazuyuki Kitazawa, Hiroshi Ohki, Yutaka Takeuchi, Shigeto Murata
3364412	Control Device of Servo Control System with Reducer	Masahiko Ito
3369299	Stator for Electrical Equipment and Rotation Electrical Machine	Kazuyuki Kitazawa, Akira Shimizu, Kazuhiko Takizawa, Shigeto Murata
3370845	Signal Generator for Motor Control and Motor Control Device	Hideyuki Ishii, Shigeharu Katou, Takatoshi Sakuma, Shouji Ito
3370886	Absolute Encoder	Sakae Kishi, Hideyuki Ishii, Shigeharu Katou, Takatoshi Sakuma
3386630	Uninterruptible Power Supply	Minoru Yanagisawa, Own jointly Nippon Telegraph and Telephone Communication, NTT Facilities Inc.
3386660	Shape of Divided Stator for Motor	Kunitoshi Kurihara, Syukichi Komatsu, Keizou Watanabe, Masahiro Koyama
3389577	Waterproofing Mechanism of Terminal Part of Multiple Core Sheath Cable and Its Formation Method	Yoshihiro Satou, Hideyuki Ishii, Osamu Kawakami
U.S. Patent 6329728	CYLINDER-TYPE LINEAR SYNCHRONOUS MOTOR	Kazuyuki Kitazawa, Shinji Suzuki, Kazuhiko Takizawa
U.S. Patent 6353274B1	MOUNTING STRUCTURE OF ROTARY ELECTRIC MACHINERY	Toshiki Ogawara, Toshio Shinohara, Michihiro Suzuki
U.S. Patent 6359354B1	WATERTIGHT BRUSHLESS FAN MOTOR	Kesatsugu Watanabe, Osamu Kawakami, Nobuyuki Aoki
U.S. Patent 6375418B1	HEAT SINK-EQUIPPED COOLING APPARATUS	Michinori Watanabe, Michihiro Suzuki
U.S. Patent 6396238B1	ROTATIONAL SPEED CONTROL CIRCUIT FOR MOTOR	Kikuo Miyahara
U.S. Patent 6405436B1	METHOD OF PRODUCING COOLING FAN ATTACHED TYPE HEAT SINK	Toshiki Ogawara, Yuichi Kodaira, Haruhisa Maruyama
U.S. Patent 6411510B1	HEAT SINK-EQUIPPED COOLING APPARATUS	Toshiki Ogawara, Haruhisa Maruyama, Michinori Watanabe, Noriyasu Sasa (SASA Laboratory)
U.S. Patent 6419007B1	HEAT SINK-EQUIPPED COOLING APPARATUS	Toshiki Ogawara, Haruhisa Maruyama, Michinori Watanabe, Noriyasu Sasa (SASA Laboratory)
U.S. Patent 6433446B1	LINEAR/ROTARY ACTUATOR	Kazuyuki Kitazawa, Yutaka Takeuchi
U.S. Patent 6445089B1	UNINTERRUPTIBLE POWER SYSTEM	Yoshiaki Okui

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Registration Number	Title	Inventors
U.S. Patent 6480383B2	ELECTRONIC COMPONENT COOLING APPARATUS	Kodaira Yuuichi, Haruhisa Maruyama, Naoko Ishiwatari
U.S. Patent 6486576B1	PERMANENT MAGNET TYPE STEPPING MOTOR	Tsunao Yura, Akira Koike, Katsumi Egawa
U.S. Patent 6486581B2	INTERIOR PERMANENT MAGNET SYNCHRONOUS MOTOR	Toshihito Miyashita, Satoru Onodera, Manabu Matsushita
U.S. Patent 6489699B2	A MOTOR WITH A SHAFT SUPPORTED BY BALL BEARING	Hiroshi Hioki, Hideyuki Ishii, Satoru Onodera, Akira Shimizu
Taiwan Patent 147975	Cooling Device Equipped with Heat Sink	Michinori Watanabe, Michihiro Suzuki
Taiwan Patent 148326	Single Bearing Type Permanent Magnet Motor and Single Bearing Fan Motor	Toshiki Ogawara, Tomoaki Ikeda
Taiwan Patent 150527	Permanent Magnet Type Stepping Motor	Tsunao Yura, Akira Koike, Katsumi Egawa
Taiwan Patent 151373	Heat Sink United Type Cooling Heat Sink	Toshiki Ogawara, Haruhisa Maruyama, Michinori Watanabe, Noriyasu Sasa (SASA Laboratory)
Taiwan Patent 151689	Installation Structure of Rotation Axis of Rotation Electrical Machine	Toshiki Ogawara, Toshio Shinohara, Michihiro Suzuki
Taiwan Patent 154107	Permanent Magnet Type Stepping Motor	Tsunao Yura, Akira Koike, Katsumi Egawa
Taiwan Patent 157727	Heat Sink United Type Cooling Heat Sink	Toshiki Ogawara, Haruhisa Maruyama, Michinori Watanabe, Noriyasu Sasa (SASA Laboratory)