PATENTS

| S/N | REGISTERED OWNER | TITLE | TERRITORY | FILING DATE | FILING/PATENT NO | STATUS |
|-----|--|---|-----------|-------------|------------------|---------|
| 1 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Method for reducing stress in coatings produced by phys | China | 13 Jan 2005 | ZL201010168209.0 | Granted |
| 2 | Nanofilm Technologies International Limited | Arc deposition apparatus and method | Singapore | 19 Jan 2005 | 2005002605 | Granted |
| 3 | Nanofilm Technologies International Limited | Continuous arc deposition apparatus and method with m | Singapore | 07 Feb 2005 | 2005006754 | Granted |
| 4 | Nanofilm Technologies International Limited | Continuous arc deposition apparatus and method with m | Japan | 22 Feb 2005 | 4866555 | Granted |
| 5 | Nanofilm Technologies International Limited | Continuous arc deposition apparatus and method with m | USA | 23 Feb 2005 | 7871506 | Granted |
| 6 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Method and apparatus for removing materials from a sub | China | 17 Aug 2005 | ZL200510090505.2 | Granted |
| 7 | Nanofilm Technologies International Limited | Metal Coatings | Singapore | 07 Aug 2006 | 2006053342 | Granted |
| 8 | Nanofilm Technologies International Limited | Cutting tools having plasma deposited carbon coatings | Singapore | 26 Jun 2007 | 2009085895 | Granted |
| 9 | Nanofilm Technologies International Limited | Cutting tools having plasma deposited carbon coatings | UK | 26 Jun 2007 | 2463439 | Granted |
| 10 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Cutting tools having plasma deposited carbon coatings | China | 26 Jun 2007 | ZL200780053790.8 | Granted |
| 11 | Nanofilm Technologies International Limited | A novel coating having reduced stress and a method of d | Singapore | 09 Jun 2009 | 2010085215 | Granted |
| 12 | Nanofilm Technologies International Limited | A novel coating having reduced stress and a method of d | Singapore | 09 Jun 2009 | 2011089869 | Granted |
| 13 | Nanofilm Technologies International Limited | A method for rapid deposition of a coating on a substrate | Singapore | 09 Jun 2009 | 2010085199 | Granted |
| 14 | Nanofilm Technologies International Limited | A process for producing an image on a substrate | Singapore | 09 Jun 2009 | 2010085173 | Granted |
| 15 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | A novel coating having reduced stress and a method of d | China | 09 Jun 2009 | ZL200980119079.7 | Granted |
| 16 | Nanofilm Technologies International Limited | Filter for removing macro-particles from a plasma beam | Japan | 30 Sep 2011 | 5554451 | Granted |
| 17 | Nanofilm Technologies International Limited | Filter for removing macro-particles from a plasma beam | Singapore | 30 Sep 2011 | 2013017272 | Granted |
| 18 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Filter for removing macro-particles from a plasma beam | China | 30 Sep 2011 | ZL201180045433.3 | Granted |
| 19 | AxynTeC Dünnschichttechnik GMBH | Material composite composed of metal/DLC/fibre-reinfo | Europe | 10 Mar 2015 | EP2918406 | Granted |
| 20 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Coating method for novel nanometer anti-fingerprint film | China | 26 Feb 2016 | ZL201610105969.4 | Granted |
| 21 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Method for coating high temperature-resistant diamond- | China | 13 Dec 2016 | ZL201611271853.4 | Granted |
| 22 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Color matching method of decorative diamond-like carbo | China | 13 Dec 2018 | ZL201811524484.0 | Granted |
| 23 | Nanofilm Technologies International Limited | Thick, Low-Stress Tetrahedral Amorphous Carbon Coating | Europe | 08 Oct 2019 | 3864186 | Granted |
| 24 | Nanofilm Technologies International Limited | Thick, Low-Stress Tetrahedral Amorphous Carbon Coating | Japan | 08 Oct 2019 | 7426386 | Granted |
| 25 | Nanofilm Technologies International Limited | Thick, Low-Stress Tetrahedral Amorphous Carbon Coating | Singapore | 08 Oct 2019 | 11202102611X | Granted |
| 26 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Thick, Low-Stress Tetrahedral Amorphous Carbon Coating | China | 08 Oct 2019 | ZL201910947105 | Granted |
| 27 | Nanofilm Technologies International Limited | Ta-C Based Coatings with Improved Hardness | Europe | 07 Nov 2019 | CT/EP2019/08061 | Pending |
| 28 | Nanofilm Technologies International Limited | Ta-C Based Coatings with Improved Hardness | Japan | 07 Nov 2019 | 7340016 | Granted |

| S/N | REGISTERED OWNER | TITLE | TERRITORY | FILING DATE | FILING/PATENT NO | STATUS |
|-----|--|---|-----------|-------------|-------------------|---------|
| 29 | Nanofilm Technologies International Limited | Ta-C Based Coatings with Improved Hardness | Singapore | 07 Nov 2019 | 11202103338R | Granted |
| 30 | Nanofilm Technologies International Limited | Ta-C Based Coatings with Improved Hardness | USA | 07 Nov 2019 | 11643733 | Granted |
| 31 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Carbon Coatings with Improved Hardness | China | 07 Nov 2019 | ZL201911082344.0 | Granted |
| 32 | Nanofilm Technologies International Limited | Temperature Resistant Carbon Coatings | Europe | 07 Nov 2019 | CT/EP2019/080620 | Pending |
| 33 | Nanofilm Technologies International Limited | Temperature Resistant Carbon Coatings | Japan | 07 Nov 2019 | 7440508 | Granted |
| 34 | Nanofilm Technologies International Limited | Temperature Resistant Carbon Coatings | Singapore | 07 Nov 2019 | 11202103322P | Granted |
| 35 | Nanofilm Technologies International Limited | Temperature Resistant Carbon Coatings | USA | 07 Nov 2019 | 12123088 | Granted |
| 36 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Temperature Resistant Carbon Coatings | China | 07 Nov 2019 | ZL201911082426.5 | Granted |
| 37 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Corrosion Resistant Carbon Coatings | China | 16 Dec 2019 | ZL201911299695.7 | Granted |
| 38 | Nanofilm Technologies International Limited | Corrosion Resistant Carbon Coatings | Europe | 17 Dec 2019 | PCT/EP2019/08561 | Pending |
| 39 | Nanofilm Technologies International Limited | Corrosion Resistant Carbon Coatings | Japan | 17 Dec 2019 | 7507766 | Granted |
| 40 | Nanofilm Technologies International Limited | Corrosion Resistant Carbon Coatings | Singapore | 17 Dec 2019 | 11202104746X | Granted |
| 41 | Nanofilm Technologies International Limited | Corrosion Resistant Carbon Coatings | USA | 17 Dec 2019 | CT/EP2019/08561 | Pending |
| 42 | Nanofilm Technologies International Limited | Improved Coating Processes | Europe | 13 Mar 2020 | PCT/EP2020/056864 | Pending |
| 43 | Nanofilm Technologies International Limited | Improved Coating Processes | Japan | 13 Mar 2020 | 7382124 | Granted |
| 44 | Nanofilm Technologies International Limited | Improved Coating Processes | Singapore | 13 Mar 2020 | 11202109137X | Granted |
| 45 | Nanofilm Technologies International Limited | Improved Coating Processes | USA | 13 Mar 2020 | PCT/EP2020/056864 | Pending |
| 46 | Nanofilm Technologies International Limited | Improved Cathode Arc Source | Europe | 13 Mar 2020 | 3938557 | Granted |
| 47 | Nanofilm Technologies International Limited | Improved Cathode Arc Source | Japan | 13 Mar 2020 | 7390396 | Granted |
| 48 | Nanofilm Technologies International Limited | Improved Cathode Arc Source | Singapore | 13 Mar 2020 | 11202109135U | Granted |
| 49 | Nanofilm Technologies International Limited | Cathode Arc Source | USA | 13 Mar 2020 | 11926890 | Granted |
| 50 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Improved Coating Processes | China | 15 Mar 2020 | ZL202010178790.8 | Granted |
| 51 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Improved Cathode Arc Source | China | 15 Mar 2020 | ZL202010178933.5 | Granted |
| 52 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Coloured Coatings | China | 06 Nov 2020 | ZL202011228218.4 | Granted |
| 53 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | A Coating Jig | China | 11 Dec 2020 | ZL202011456617.6 | Granted |
| 54 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Device and Method for Detecting Rotating Performance | China | 29 Dec 2020 | 202011594045.8 | Pending |
| 55 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Measuring Device and Measuring Method for Cylindrical | China | 29 Dec 2020 | 202011594035.4 | Pending |
| 56 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Black Coatings | China | 06 Apr 2021 | ZL202110370178.5 | Granted |
| 57 | Yizheng Nahuan Technology Co., Ltd. | Piston ring coating with excellent running-in performance | China | 08 May 2021 | 202110500126.5 | Pending |

| S/N | REGISTERED OWNER | TITLE | TERRITORY | FILING DATE | ILING/PATENT NO | STATUS |
|-----|--|--|-----------|-------------|-------------------|---------|
| 58 | Nanofilm Technologies International Limited | Improved Cathode Arc Source, Filters Thereof and Metho | Europe | 18 Jun 2021 | 4066272 | Granted |
| 59 | Nanofilm Technologies International Limited | Improved Cathode Arc Source, Filters Thereof and Metho | Japan | 18 Jun 2021 | 7395761 | Granted |
| 60 | Nanofilm Technologies International Limited | Improved Cathode Arc Source, Filters Thereof and Metho | Singapore | 18 Jun 2021 | 11202251416K | Granted |
| 61 | Nanofilm Technologies International Limited | Improved Cathode Arc Source, Filters Thereof and Metho | USA | 18 Jun 2021 | 11903116 | Granted |
| 62 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Improved Cathode Arc Source, Filters Thereof and Metho | China | 18 Jun 2021 | ZL202110683431.2 | Granted |
| 63 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Coating Baffle | China | 30 Jun 2021 | 202110740570.4 | Pending |
| 64 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Double-Body Coating Machine | China | 30 Jun 2021 | 202110740569.1 | Pending |
| 65 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Coating Equipment | China | 08 Jul 2021 | 202110771536.3 | Pending |
| 66 | Sydrogen Energy Pte. Ltd. | Carbon Coated Hydrogen Fuel Cell Bipolar Plates | Europe | 14 Jul 2021 | EP4088332 | Granted |
| 67 | Sydrogen Energy Pte. Ltd. | Carbon Coated Hydrogen Fuel Cell Bipolar Plates | Japan | 14 Jul 2021 | 7313577 | Granted |
| 68 | Nanofilm Technologies International Limited | Carbon Coated Hydrogen Fuel Cell Bipolar Plates | Singapore | 14 Jul 2021 | 11202252047T | Pending |
| 69 | Sydrogen Energy Pte. Ltd. | Carbon Coated Hydrogen Fuel Cell Bipolar Plates | USA | 14 Jul 2021 | 11855308 | Granted |
| 70 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Carbon Coated Hydrogen Fuel Cell Bipolar Plates | China | 14 Jul 2021 | 202110798362.X | Pending |
| 71 | Yizheng Nahuan Technology Co., Ltd. | Continuous fully automatic cleaning machine for piston ri | China | 23 Jul 2021 | ZL202110837595.6 | Granted |
| 72 | Yizheng Nahuan Technology Co., Ltd. | Vacuum film removing machine for removing DLC film fro | China | 28 Jul 2021 | ZL202110855015.6 | Granted |
| 73 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Piston Rings and Methods of Manufacture | USA | 12 Nov 2021 | PCT/EP2021/08153 | Pending |
| 74 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Piston Rings and Methods of Manufacture | China | 12 Nov 2021 | ZL202110360718.1 | Granted |
| 75 | Sydrogen (Shanghai) Technology Co., Ltd. | Coating Rotating Carousel | China | 11 May 2022 | ZL202210514160.2 | Granted |
| 76 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Coating Rotating Carousel | China | 11 May 2022 | ZL202210514113.8 | Granted |
| 77 | Nanofilm Technologies International Limited | Anti-Static Coating | Singapore | 31 May 2022 | PCT/EP2022/06481 | Pending |
| 78 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Anti-Static Coating | China | 31 May 2022 | 202210639284.3 | Pending |
| 79 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | A glass flipping device for vertical coating and flipping me | China | 25 Aug 2022 | 202211023245.7 | Pending |
| 80 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | A cleaning agent capable of improving color difference ar | China | 03 Nov 2022 | 2022113685266.0 | Pending |
| 81 | Yizheng Nahuan Technology Co., Ltd. | A temperature resistance testing device for piston rings | China | 08 Dec 2022 | 202211581579.6 | Pending |
| 82 | Sydrogen Energy Pte. Ltd. | Fuel Cell Bipolar Plates | Europe | 29 Dec 2022 | 4399753 | Granted |
| 83 | Sydrogen Energy Pte. Ltd. | Fuel Cell Bipolar Plates | Japan | 29 Dec 2022 | PCT/EP2022/088004 | Pending |
| 84 | Sydrogen Energy Pte. Ltd. | Fuel Cell Bipolar Plates | Singapore | 29 Dec 2022 | PCT/EP2022/088004 | Pending |
| 85 | Sydrogen (Shanghai) Technology Co., Ltd. | Fuel Cell Bipolar Plates | China | 29 Dec 2022 | 202211710455.3 | Pending |
| 86 | | Improvements in Carbon Coated Electrodes | China | 18 Jan 2023 | ZL202310063345 | Granted |
| 87 | Nanofilm Technologies International Limited | Carbon Coated Electrodes | Europe | 20 Jan 2023 | 4281601 | Granted |

| S/N | REGISTERED OWNER | TITLE | TERRITORY | FILING DATE | FILING/PATENT NO | STATUS |
|--------|--|---|-----------|-------------|-------------------|---------|
| 88 | Nanofilm Technologies International Limited | Carbon Coated Electrodes | Japan | 20 Jan 2023 | 7558429 | Granted |
| 89 | Nanofilm Technologies International Limited | Carbon Coated Electrodes | Singapore | 20 Jan 2023 | 11202305750R | Granted |
| 90 | Nanofilm Technologies International Limited | Carbon Coated Electrodes | USA | 20 Jan 2023 | 11898257 | Granted |
| 91 | Sydrogen (Shanghai) Technology Co., Ltd. | An electrochemical testing device | China | 17 Feb 2023 | 202310134443.9 | Pending |
| 92 | Yizheng Nahuan Technology Co., Ltd. | A clamping device for piston ring coating | China | 27 Mar 2023 | 202310301761.X | Pending |
| 93 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Inline coating apparatus for metallic fuel cell bipolar plate | China | 04 May 2023 | 202310492029.5 | Pending |
| 94 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | An auxiliary cathode device for glow-discharge coating ar | China | 18 Jul 2023 | 202310885329.X | Pending |
| 95 | Nanofilm Technologies International Limited | Hollow cathode arc plasma device | Europe | 27 Oct 2022 | 4362058 | Granted |
| 96 | Nanofilm Technologies International Limited | Hollow cathode arc plasma device | WIPO | 04 Oct 2023 | PCT/EP2023/07748 | Pending |
| 97 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Hollow cathode arc plasma device | China | 10 Oct 2023 | 202311306969.7 | Pending |
| 98 | Nanofilm Technologies International Limited | Sealed electrical devices | WIPO | 03 Nov 2023 | PCT/EP2023/080708 | Pending |
| 99 | Nanofilm Technologies International Limited an | Coated solar cell | WIPO | 03 Nov 2023 | CT/EP2023/08071 | Pending |
| 100 | Nanofilm Technologies International Limited an | Improved CSS deposition process | WIPO | 19 Jan 2024 | PCT/EP2024/051234 | Pending |
| 101 | Yizheng Nahuan Technology Co., Ltd. | Automatic feeding device based on piston ring DLC honin | China | 08 Jan 2024 | 202410022662.2 | Pending |
| (updat | ed 2024-12-15) | | | | | |

UTILITY MODELS (实用新型专利)

| S/N | REGISTERED OWNER | TITLE | TERRITORY | FILING DATE | PATENT NO. | STATUS |
|-----|--|---|-----------|-------------|------------------|---------|
| 1 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | A vacuum coating apparatus for a nanometer anti-finger | China | 26 Feb 2016 | ZL201620144366.0 | Granted |
| 2 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | A large vacuum coating apparatus producing diamond th | China | 30 Dec 2016 | ZL201621474910.4 | Granted |
| 3 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | A novel type of diamond thin-film | China | 30 Dec 2016 | ZL201621487788.4 | Granted |
| 4 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Coating shielding jig for watchcase | China | 30 Jul 2019 | ZL201921212034.1 | Granted |
| 5 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Quick feeding tool of coating clamp | China | 30 Jul 2019 | ZL201921212037.5 | Granted |
| 6 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Test device capable of cyclically simulating ball head batt | China | 30 Jul 2019 | ZL201921212047.9 | Granted |
| 7 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Coating film shielding jig for product with screw teeth | China | 30 Jul 2019 | ZL201921212595.1 | Granted |
| 8 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Coating jig capable of improving coating uniformity | China | 30 Jul 2019 | ZL201921212613.6 | Granted |
| 9 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Flat valve machining equipment with riveting and air tigh | China | 07 Aug 2019 | ZL201921271011.8 | Granted |
| 10 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Efficient air drying equipment | China | 07 Aug 2019 | ZL201921270512.4 | Granted |
| 11 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | High-temperature-resistant detection equipment for auto | China | 07 Aug 2019 | ZL201921270491.6 | Granted |

| S/N | REGISTERED OWNER | TITLE | TERRITORY | FILING DATE | FILING/PATENT NO | STATUS |
|-----|--|---|-----------|-------------|------------------|---------|
| 12 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Automatic bottle taking detection equipment | China | 07 Aug 2019 | ZL201921271008.6 | Granted |
| 13 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Automatic packaging machine | China | 07 Aug 2019 | ZL201921270485.0 | Granted |
| 14 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | A coating jig | China | 25 Nov 2020 | ZL202022754870.1 | Granted |
| 15 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | A coating jig | China | 25 Nov 2020 | ZL202022764051.5 | Granted |
| 16 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | A coating jig | China | 25 Nov 2020 | ZL202022754917.4 | Granted |
| 17 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | A coating jig | China | 11 Dec 2020 | ZL202022988894.3 | Granted |
| 18 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | A coating jig | China | 11 Dec 2020 | ZL202022987993.X | Granted |
| 19 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Contact resistance testing device | China | 11 Dec 2020 | ZL202022988402.0 | Granted |
| 20 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Device for detecting rotation performance of rotation me | China | 29 Dec 2020 | ZL202023254272.4 | Granted |
| 21 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Measuring device for cylindrical target | China | 29 Dec 2020 | ZL202023254271.X | Granted |
| 22 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Coating Baffle | China | 30 Jun 2021 | ZL202121476762.0 | Granted |
| 23 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Double-Body Coating Machine | China | 30 Jun 2021 | ZL202121476761.6 | Granted |
| 24 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Coating Equipment | China | 08 Jul 2021 | ZL202121545740.5 | Granted |
| 25 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | A percussion experiment device | China | 11 May 2022 | ZL202221132543.5 | Granted |
| 26 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | A contact resistance automatic test equipment | China | 11 May 2022 | ZL202221128098.5 | Granted |
| 27 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | A liquid evaporation coating device | China | 11 May 2022 | ZL202221132534.6 | Granted |
| 28 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | A rotating holder testing device | China | 11 May 2022 | ZL202221132507.9 | Granted |
| 29 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Coating Rotating Frame | China | 11 May 2022 | ZL202221132458.9 | Granted |
| 30 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Coating Rotating Frame | China | 11 May 2022 | ZL202221176799.6 | Granted |
| 31 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | A glass flipping device for vertical vacuum coating | China | 25 Aug 2022 | ZL202222239812.4 | Granted |
| 32 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | A coating jig for tiny electronic products | China | 03 Nov 2022 | ZL202222922370.3 | Granted |
| 33 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Inline coating apparatus for metallic fuel cell bipolar plate | China | 04 May 2023 | ZL202321040504.7 | Granted |
| 34 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | An anode layer ion source and its cathodic shield | China | 04 May 2023 | ZL202321040525.9 | Granted |
| 35 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | An auxiliary cathode for glow-discharge coating and coati | China | 18 Jul 2023 | ZL202321895198.5 | Granted |
| 36 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Coating fixtures and cleaning devices | China | 24 Oct 2023 | ZL202322864538.4 | Granted |
| 37 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Fabric coating fixture | China | 24 Oct 2023 | ZL202322861819.4 | Granted |
| 38 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Coating device | China | 09 Nov 2023 | ZL202323037511.4 | Granted |
| 39 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Gradient color coatings | China | 24 Nov 2023 | ZL202323193956.1 | Granted |
| 40 | Nanofilm Vacuum Coating (Shanghai) Co., Ltd. | Coating device and coating equipment | China | 24 Nov 2023 | ZL202323198457.1 | Granted |
| 41 | Yizheng Nahuan Technology Co., Ltd. | Waste liquid collecting tank for cleaning piston rings | China | 22 Jul 2021 | ZL202121678094.X | Granted |

| S/N | REGISTERED OWNER | TITLE | TERRITORY | FILING DATE FILING/PATENT NO | STATUS |
|-----|--|---|-----------|------------------------------|---------|
| 42 | Yizheng Nahuan Technology Co., Ltd. | Multi-groove cleaning machine for piston ring coating | China | 22 Jul 2021 ZL202121677773.5 | Granted |
| 43 | Yizheng Nahuan Technology Co., Ltd. | Cleaning jig for cleaning piston rings | China | 22 Jul 2021 ZL202121676728.8 | Granted |
| 44 | Yizheng Nahuan Technology Co., Ltd. | Piston ring cleaning machine capable of realizing cyclic ut | China | 23 Jul 2021 ZL202121685528.9 | Granted |
| 45 | Yizheng Nahuan Technology Co., Ltd. | Vacuum drying device for cleaning piston rings | China | 23 Jul 2021 ZL202121685429.0 | Granted |
| 46 | Yizheng Nahuan Technology Co., Ltd. | Piston ring feeding mechanism for vacuum coating machi | China | 09 Aug 2021 ZL202121856789.2 | Granted |
| 47 | Yizheng Nahuan Technology Co., Ltd. | Piston ring vacuum coating machine with vacuum degree | China | 09 Aug 2021 ZL202121850444.6 | Granted |
| 48 | Yizheng Nahuan Technology Co., Ltd. | Vacuum coating machine capable of uniformly coating pi | China | 09 Aug 2021 ZL202121865988.X | Granted |
| 49 | Yizheng Nahuan Technology Co., Ltd. | Transfer device for piston ring DLC vacuum coating | China | 11 Aug 2021 ZL202121875050.6 | Granted |
| 50 | Yizheng Nahuan Technology Co., Ltd. | Coating jig for piston ring DLC vacuum coating | China | 11 Aug 2021 ZL202121876624.1 | Granted |
| 51 | Yizheng Nahuan Technology Co., Ltd. | Fixing jig for piston ring vacuum coating | China | 02 Sep 2021 ZL202122102791.7 | Granted |
| 52 | Yizheng Nahuan Technology Co., Ltd. | Driving power assembly for vacuum coating machine | China | 02 Sep 2021 ZL202122102709.0 | Granted |
| 53 | Yizheng Nahuan Technology Co., Ltd. | Cooling system assembled on vacuum coating machine | China | 02 Sep 2021 ZL202122112076.1 | Granted |
| 54 | Yizheng Nahuan Technology Co., Ltd. | Piston ring coating machine with intelligent temperature | China | 03 Sep 2021 ZL202122112037.1 | Granted |
| 55 | Yizheng Nahuan Technology Co., Ltd. | Insulation pre-detection device for vacuum coating mach | China | 03 Sep 2021 ZL202122126966.8 | Granted |
| 56 | Yizheng Nahuan Technology Co., Ltd. | Polishing device for piston ring machining | China | 03 Nov 2022 ZL202222921685.6 | Granted |
| 57 | Yizheng Nahuan Technology Co., Ltd. | Vacuumizing device of piston ring coating machine | China | 03 Nov 2022 ZL202222920647.9 | Granted |
| 58 | Yizheng Nahuan Technology Co., Ltd. | Spraying mechanism for cleaning piston rings | China | 04 Nov 2022 ZL202222933770.4 | Granted |
| 59 | Yizheng Nahuan Technology Co., Ltd. | A coating device for piston rings | China | 05 Dec 2022 ZL202223243749.8 | Granted |
| 60 | Yizheng Nahuan Technology Co., Ltd. | A fixture for piston ring vacuum coating | China | 09 Dec 2022 ZL202223299761.0 | Granted |
| 61 | Yizheng Nahuan Technology Co., Ltd. | Air cooling assembly for vacuum coating machine | China | 10 Apr 2023 ZL202320760645.X | Granted |
| 62 | Yizheng Nahuan Technology Co., Ltd. | Fixture used in piston ring coating preparation | China | 13 Oct 2023 ZL202322750909.6 | Granted |
| 63 | Yizheng Nahuan Technology Co., Ltd. | Vacuum coating equipment with filtering device | China | 13 Oct 2023 ZL202322760219.9 | Granted |
| 64 | Yizheng Nahuan Technology Co., Ltd. | cathode arc device for preparation of cathode arc coating | China | 04 Jan 2024 ZL202420017112.7 | Granted |
| 65 | Sydrogen (Shanghai) Technology Co., Ltd. | A three-electrode cell device | China | 17 Feb 2023 ZL202320252312.6 | Granted |
| 66 | Sydrogen (Shanghai) Technology Co., Ltd. | A device for testing the strength of welding joints | China | 17 Feb 2023 ZL202320239052.9 | Granted |
| 67 | Sydrogen (Shanghai) Technology Co., Ltd. | A coating fixture | China | 23 Aug 2023 ZL202322284088.1 | Granted |
| | Sydrogen (Shanghai) Technology Co., Ltd. | A coating fixture | China | 23 Aug 2023 ZL202322278269.3 | Granted |
| 69 | Sydrogen (Shanghai) Technology Co., Ltd. | Vacuum drying device | China | 23 Aug 2023 ZL202322278887.8 | Granted |
| 70 | Sydrogen (Shanghai) Technology Co., Ltd. | Testing device | China | 27 Sep 2023 ZL202322645827.5 | Granted |
| 71 | Sydrogen (Shanghai) Technology Co., Ltd. | Testing device for contact resistance | China | 19 Mar 2024 ZL202420538994.1 | Granted |

| S/N | REGISTERED OWNER |
|-----|------------------|
| | |

TITLE

TERRITORY FILING DATE FILING/PATENT NO STATUS

(updated 2024-12-15)