



## PatBase Legal Information Browser | reassignment Family: 51934480

### Automatic Faucets

An automatic faucet includes a housing constructed to receive at least one water inlet conduit and having a spout for delivering water. The automatic faucet includes a valve module, a sensor module, a battery module, a turbine module, and a control module. The valve module includes a valve controlled by an electromagnetic actuator for controlling the water flow from the spout. The sensor module is constructed to provide sensor data influenced by a user. The control module is constructed to control opening and closing of the valve by providing signals to the electromagnetic actuator. The control module is also constructed to receive sensor data from the sensor module and execute a sensing algorithm. The control module is also constructed to execute a power management algorithm for managing electrical power generated by the water turbine and provided to and from the battery.

### SLOAN VALVE CO

| Publication                   | Date     | Inventors | Inventors (Std.)                                                                                                                                                 | Assignees | Assignees (Std.) | Most Recent Reassignment (Event) |
|-------------------------------|----------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------------|----------------------------------|
| CA2830168 AA<br>CA20122830168 | 20130913 |           | Chen Qiaohong<br>Thompson Stanley O<br>Carpenter David L<br>Wang Xu<br>Krull Jeff<br>Daher Jean F<br>Mo Xiaoxiong<br>Herbert Kay<br>Vish Ronald J<br>Guler Fatih | -         | Sloan Valve Co   |                                  |
| CA2830168 C<br>CA20122830168  | 20200310 |           | Herbert Kay<br>Mo Xiaoxiong<br>Krull Jeff<br>Daher Jean F<br>Chen Qiaohong<br>Vish Ronald J<br>Guler Fatih<br>Wang Xu<br>Thompson Stanley O<br>Carpenter David L | -         | Sloan Valve Co   |                                  |

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|---------------------------------|----------|----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|----------------|--|
| CA2843596 AA<br>CA20122843596   | 20140129 |                                                                                              | Chen Qiaohong<br>Wang Xu<br>Krull Jeff<br>Daher Jean F<br>Mo Xiaoxiong<br>Herbert Kay<br>Vish Ronald J<br>Guler Fatih                                            | -      | Sloan Valve Co |  |
| CA2843596 C<br>CA20122843596    | 20200128 |                                                                                              | Herbert Kay<br>Mo Xiaoxiong<br>Krull Jeff<br>Daher Jean F<br>Chen Qiaohong<br>Vish Ronald J<br>Guler Fatih<br>Wang Xu                                            | -      | Sloan Valve Co |  |
| CN103459730 A<br>CN201280013636 | 20131218 | 陈巧红<br>凯·赫伯特<br>戴维·L·卡彭特<br>费斯·古勒<br>斯坦利·O·汤普森<br>罗纳德·J·维什<br>莫小雄<br>琼·F·达海尔<br>杰夫·克鲁尔<br>王旭 | Chen Qiaohong<br>Thompson Stanley O<br>Carpenter David L<br>Wang Xu<br>Daher Jean F<br>Krull Jeff<br>Herbert Kay<br>Mo Xiaoxiong<br>Vish Ronald J<br>Guler Fatih | 仕龙阀门公司 | Sloan Valve Co |  |
| CN103459730 B<br>CN201280013636 | 20160406 | 杰夫 克鲁尔<br>琼 F 达海尔<br>斯坦利 O 汤普森<br>王旭<br>莫小雄<br>陈巧红<br>戴维 L 卡彭特<br>凯 赫伯特<br>罗纳德 J 维什<br>费斯 古勒 |                                                                                                                                                                  | 仕龙阀门公司 | -              |  |
| CN103842597 A<br>CN201280038725 | 20140604 | 凯 赫伯特<br>琼 F 达海尔<br>陈巧红<br>罗纳德 J 维什<br>杰夫 克鲁尔<br>莫小雄<br>费斯 古勒<br>王旭                          | Chen Qiaohong<br>Wang Xu<br>Daher Jean F<br>Krull Jeff<br>Herbert Kay<br>Mo Xiaoxiong<br>Vish Ronald J<br>Guler Fatih                                            | 仕龙阀门公司 | Sloan Valve Co |  |

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| CN103842597 B<br>CN201280038725 | 20170801 | 杰夫 克鲁尔<br>凯 赫伯特<br>琼 F 达海尔<br>王旭<br>陈巧红<br>莫小雄<br>罗纳德 J 维什<br>费斯 古勒<br>琼·F·达海尔<br>凯·赫伯特<br>费斯·古勒<br>罗纳德·J·维什<br>杰夫·克鲁尔                                                   |                                                                                                                                                                  | 仕龙阀门公司 | -              |  |
| CN105804166 A<br>CN201610127601 | 20160727 | 杰夫 克鲁尔<br>琼 F 达海尔<br>斯坦利 O 汤普森<br>王旭<br>莫小雄<br>陈巧红<br>戴维 L 卡彭特<br>凯 赫伯特<br>罗纳德 J 维什<br>费斯 古勒<br>斯坦利·O·汤普森<br>戴维·L·卡彭特<br>凯·赫伯特<br>费斯·古勒<br>罗纳德·J·维什<br>琼·F·达海尔<br>杰夫·克鲁尔 | Carpenter David L<br>Wang Xu<br>Guler Fatih<br>Thompson Stanley O<br>Mo Xiaoxiong<br>Chen Qiaohong<br>Herbert Kay<br>Krull Jeff<br>Vish Ronald J<br>Daher Jean F | 仕龙阀门公司 | Sloan Valve Co |  |
| CN105804166 B<br>CN201610127601 | 20190326 | 凯 赫伯特<br>莫小雄<br>杰夫 克鲁尔<br>琼 F 达海尔<br>陈巧红<br>罗纳德 J 维什<br>费斯 古勒<br>王旭<br>斯坦利 O 汤普森<br>戴维 L 卡彭特<br>斯坦利·O·汤普森<br>琼·F·达海尔<br>戴维·L·卡彭特<br>费斯·古勒<br>罗纳德·J·维什<br>杰夫·克鲁尔<br>凯·赫伯特 |                                                                                                                                                                  | 仕龙阀门公司 | -              |  |

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| EP2739794 A2<br>EP20120820445 | 20140611 |                                                                                                                                                                                                                                                                          | Chen Qiaohong<br>Wang Xu<br>Daher Jean F<br>Krull Jeff<br>Herbert Kay<br>Mo Xiaoxiong<br>Vish Ronald J<br>Guler Fatih                                                    | - | Sloan Valve Co |  |
| EP2739794 A4<br>EP20120820445 | 20160224 |                                                                                                                                                                                                                                                                          | Guler Fatih<br>Chen Qiaohong<br>Mo Xiaoxiong<br>Wang Xu<br>Herbert Kay<br>Krull Jeff<br>Vish Ronald J<br>Daher Jean F                                                    | - | Sloan Valve Co |  |
| HK1191987 A1<br>HK20140105341 | 20140808 | 戴維.<br>. 維什<br>費斯. 古勒<br>. 卡彭特<br>莫小雄<br>杰夫. 克魯爾<br>陳巧紅<br>. 湯普森<br>凱. 赫伯特<br>琮.<br>. 達海爾<br>斯坦利.<br>羅納德.<br>王旭<br>凱. 赫伯特<br>杰夫 克魯爾<br>Daher Jean F<br>琮 F 達海爾<br>Vish Ronald J<br>羅納德 J 維什<br>費斯 古勒<br>Thompson Stanley O<br>斯坦利 O 湯普森<br>Carpenter David L<br>戴維 L 卡彭特 | Daher Jean F F<br>Guler Fatih<br>Chen Qiaohong<br>Mo Xiaoxiong<br>Wang Xu<br>Herbert Kay<br>Krull Jeff<br>Carpenter David L L<br>Vish Ronald J J<br>Thompson Stanley O O | - | Sloan Valve Co |  |

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| HK1191987 B<br>HK20140105341  | 20170630 | Herbert Kay<br>凱 赫伯特<br>Mo Xiaoxiong<br>莫小雄<br>Krull Jeff<br>杰夫 克魯爾<br>Daher Jean F<br>琮 F 達海爾<br>Chen Qiaohong<br>陳巧紅<br>Vish Ronald J<br>羅納德 J 維什<br>Guler Fatih<br>費斯 古勒<br>Wang Xu<br>王旭<br>Thompson Stanley O<br>斯坦利 O 湯普森<br>Carpenter David L<br>戴維 L 卡彭特 |  | Sloan Valve Co | - |  |
| HK1195927 A1<br>HK20140109367 | 20141128 | Herbert Kay<br>凱 赫伯特<br>Mo Xiaoxiong<br>莫小雄<br>Krull Jeff<br>杰夫 克魯爾<br>Daher Jean F<br>琮 F 達海爾<br>Chen Qiaohong<br>陳巧紅<br>Vish Ronald J<br>羅納德 J 維什<br>Guler Fatih<br>費斯 古勒<br>Wang Xu<br>王旭                                                                     |  | Sloan Valve Co | - |  |

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| HK1195927 B<br>HK20140109367     | 20180525 | Herbert Kay<br>凱 赫伯特<br>Mo Xiaoxiong<br>莫小雄<br>Krull Jeff<br>杰夫 克魯爾<br>Daher Jean F<br>琼 F 達海爾<br>Chen Qiaohong<br>陳巧紅<br>Vish Ronald J<br>羅納德 J 維什<br>Guler Fatih<br>費斯 古勒<br>Wang Xu<br>王旭 |                                                                                                                                                                  | Sloan Valve Co | -              |  |
| MX2013010365 A1<br>MX20130010365 | 20141024 | Stanley O Thompson<br>Qiaohong Chen<br>Fatih Guler<br>Xiaoxiong Mo<br>David L Carpenter<br>Xu Wang<br>Jean F Daher<br>Kay Herbert<br>Ronald J Vish<br>Jeff Krull                             | Chen Qiaohong<br>Thompson Stanley O<br>Carpenter David L<br>Wang Xu<br>Daher Jean F<br>Krull Jeff<br>Herbert Kay<br>Mo Xiaoxiong<br>Vish Ronald J<br>Guler Fatih | -              | Sloan Valve Co |  |
| MX2014001203 A1<br>MX20140001203 | 20140915 | Qiaohong Chen<br>Fatih Guler<br>Kay Herbert<br>Xu Wang<br>Jean F Daher<br>Xiaoxiong Mo<br>Ronald J Vish<br>Jeff Krull                                                                        | Chen Qiaohong<br>Wang Xu<br>Daher Jean F<br>Krull Jeff<br>Herbert Kay<br>Mo Xiaoxiong<br>Vish Ronald J<br>Guler Fatih                                            | -              | Sloan Valve Co |  |
| MX346610 B<br>MX20130010365      | 20170327 |                                                                                                                                                                                              | Ronald J Vish<br>Qiaohong Chen<br>Fatih Guler<br>David L Carpenter<br>Xiaoxiong Mo<br>Stanley O Thompson<br>Jean F Daher<br>Kay Herbert<br>Xu Wang<br>Jeff Krull | -              | Sloan Valve Co |  |

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| MX354313 B<br>MX20140001203      | 20180226 |  | Ronald J Vish<br>Fatih Guler<br>Xu Wang<br>Xiaoxiong Mo<br>Jeff Krull<br>Jean F Daher<br>Kay Herbert<br>Qiaohong Chen                                            | -                          | Sloan Valve Co |                                                                                           |
| US10508423 BB<br>US20140999219   | 20191217 |  | Herbert Kay<br>Mo Xiaoxiong<br>Krull Jeff<br>Daher Jean F<br>Chen Qiaohong<br>Vish Ronald J<br>Guler Fatih<br>Wang Xu<br>Thompson Stanley O<br>Carpenter David L | Bank Of America Na Bank As | Sloan Valve Co | Assignment<br>BANK OF AMERICA, N.A., AS BANK, ILLINOIS<br><b>Effective Date: 20210701</b> |
| US2014174556 AA<br>US20130987914 | 20140626 |  | Chen Qiaohong<br>Thompson Stanley O<br>Carpenter David L<br>Wang Xu<br>Daher Jean F<br>Krull Jeff<br>Herbert Kay<br>Mo Xiaoxiong<br>Vish Ronald J<br>Guler Fatih | Bank Of America Na Bank As | Sloan Valve Co |                                                                                           |
| US2014246099 AA<br>US20140999219 | 20140904 |  | Chen Qiaohong<br>Thompson Stanley O<br>Carpenter David L<br>Wang Xu<br>Daher Jean F<br>Krull Jeff<br>Herbert Kay<br>Mo Xiaoxiong<br>Vish Ronald J<br>Guler Fatih | Bank Of America Na Bank As | Sloan Valve Co |                                                                                           |

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| US9695579 BB<br>US20130987914  | 20170704 |  | Carpenter David L<br>Wang Xu<br>Guler Fatih<br>Thompson Stanley O<br>Mo Xiaoxiong<br>Chen Qiaohong<br>Herbert Kay<br>Krull Jeff<br>Vish Ronald J<br>Daher Jean F | Bank Of America Na Bank As | Sloan Valve Co | Assignment<br>BANK OF AMERICA, N.A., AS BANK, ILLINOIS<br><b>Effective Date: 20210701</b> |
| WO12125213 A1<br>WO2012US00150 | 20120920 |  | Krull Jeff<br>Carpenter David L<br>Guler Fatih<br>Wang Xu<br>Vish Ronald J<br>Mo Xiaoxiong<br>Daher Jean F<br>Chen Qiaohong<br>Thompson Stanley O<br>Herbert Kay | Sloan Valve Company        | Sloan Valve Co |                                                                                           |
| WO13019272 A2<br>WO2012US00337 | 20130207 |  | Krull Jeff<br>Herbert Kay<br>Guler Fatih<br>Wang Xu<br>Vish Ronald J<br>Mo Xiaoxiong<br>Chen Qiaohong<br>Daher Jean F                                            | -                          | Sloan Valve Co |                                                                                           |
| WO13019272 A3<br>WO2012US00337 | 20130523 |  | Krull Jeff<br>Herbert Kay<br>Guler Fatih<br>Wang Xu<br>Vish Ronald J<br>Mo Xiaoxiong<br>Chen Qiaohong<br>Daher Jean F                                            | Sloan Valve Company        | Sloan Valve Co |                                                                                           |