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(12)

United States Design Patent

Yang et al.

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(54) ROOFTOP JUNCTION BOX

(56) References Cited

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(\*\*) Term: 15 Years

(21) Appl. No.: 29/854,068

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U.S. PATENT DOCUMENTS

|              |         |                 |         |
|--------------|---------|-----------------|---------|
| D245,906 S   | 9/1977  | Taylor          |         |
| D260,090 S   | 8/1981  | Hughes et al.   |         |
| D260,878 S   | 9/1981  | Dolinar et al.  |         |
| 4,298,204 A  | 11/1981 | Jinkins         |         |
| 4,526,407 A  | 7/1985  | Kifer           |         |
| D301,628 S   | 6/1989  | Fuller          |         |
| D308,854 S   | 6/1990  | Fuhrmann et al. |         |
| D310,824 S   | 9/1990  | Layton          |         |
| D319,706 S   | 9/1991  | Jones           |         |
| 5,226,263 A  | 7/1993  | Merrin et al.   |         |
| 5,357,054 A  | 10/1994 | Beckerich       |         |
| D364,625 S   | 11/1995 | Grande          |         |
| D373,212 S   | 8/1996  | Clark           |         |
| D374,429 S * | 10/1996 | Blais           | D13/156 |
| D400,281 S   | 10/1998 | Kerr            |         |
| D400,512 S   | 11/1998 | Korhonen        |         |

(Continued)

OTHER PUBLICATIONS

“Vynckier Vm773ct . . . ” found on the internet by RMS at: <https://www.globalindustrial.com/p/electrical/boxes/pushbutton-enclosures/vynckier-vm-773ct-vm-7-inch-x-7-inch-x-3-inch-non-metallic-enclosure-transparent-cover> reference dated Mar. 23, 2021.

(Continued)

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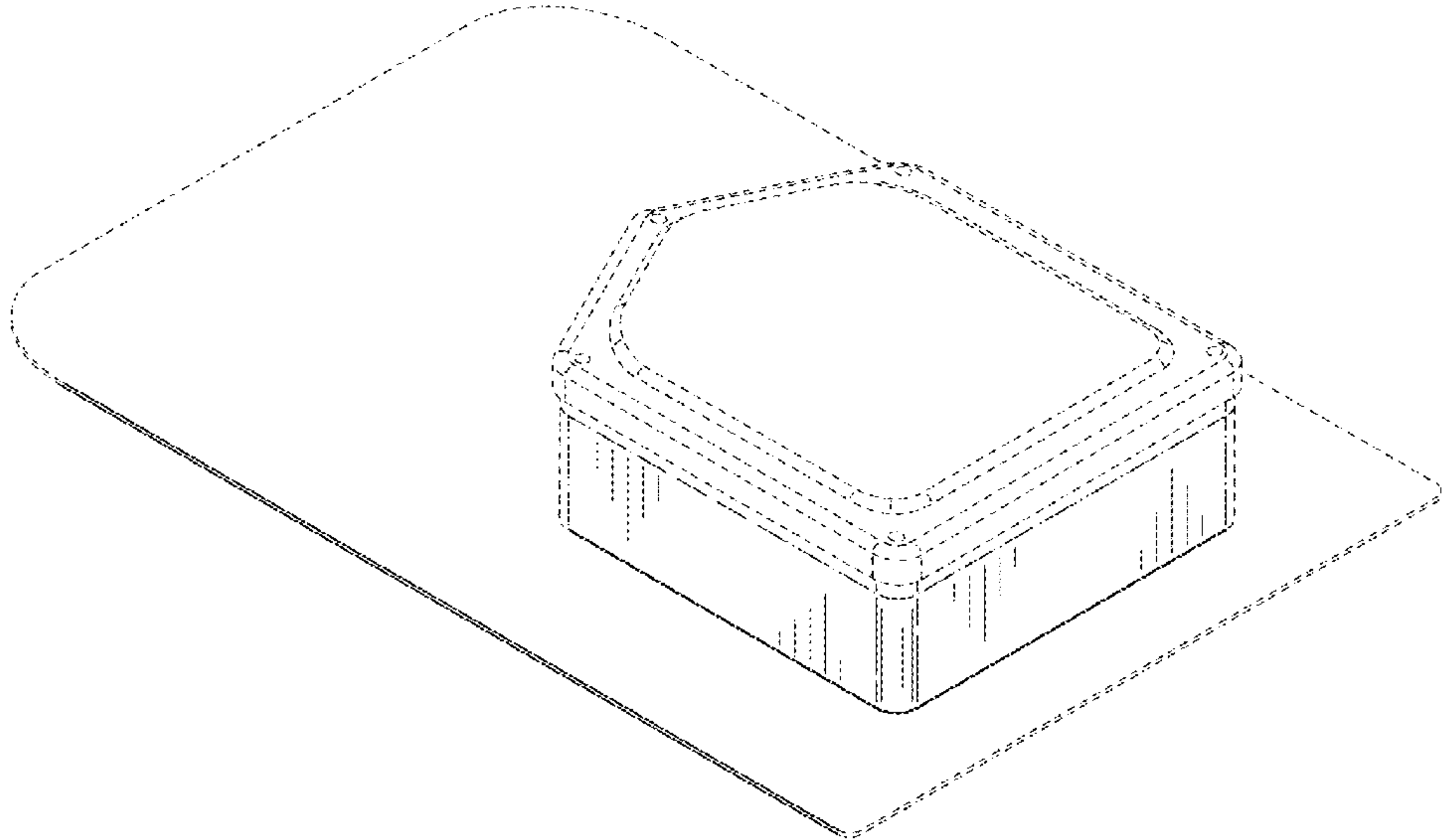
(57) CLAIM

The ornamental design for a rooftop junction box, as shown and described.

DESCRIPTION

The sole FIGURE is a perspective view of a rooftop junction box embodying our new design.  
The dash-dash broken lines showing a portion of the rooftop junction box form no part of the claimed design. The dash-dot lines represent boundary lines and form no part of the claimed design.

1 Claim, 1 Drawing Sheet



Related U.S. Application Data

(63) Continuation-in-part of application No. 29/801,056, filed on Jul. 26, 2021, now Pat. No. Des. 966,199, which is a continuation of application No. 29/727,512, filed on Mar. 11, 2020, now Pat. No. Des. 926,703, which is a continuation of application No. 16/781,785, filed on Feb. 4, 2020, now Pat. No. 10,804,685, which is a continuation of application No. 16/030,488, filed on Jul. 9, 2018, now Pat. No. 10,594,121.

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(58) Field of Classification Search

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CPC H01Q 1/02; H02S 20/23; G02B 6/0043; H02G 3/081; H02G 3/14; H02G 3/088

See application file for complete search history.

(56)

## References Cited

## U.S. PATENT DOCUMENTS

|                   |         |                                       |                        |
|-------------------|---------|---------------------------------------|------------------------|
| D402,275 S        | 12/1998 | Korhonen                              |                        |
| D409,160 S        | 5/1999  | Sonntag                               |                        |
| 5,931,325 A       | 8/1999  | Filipov                               |                        |
| D422,265 S        | 4/2000  | Noble                                 |                        |
| D427,146 S        | 6/2000  | Wei                                   |                        |
| D466,087 S *      | 11/2002 | Cuny                                  | D13/152                |
| 6,740,809 B2      | 5/2004  | Vacheron                              |                        |
| D509,214 S *      | 9/2005  | Chung                                 | D14/240                |
| 6,942,189 B2 *    | 9/2005  | Capozzi                               | H01Q 1/02<br>248/185.1 |
| D518,002 S        | 3/2006  | Johanneck et al.                      |                        |
| 7,175,330 B1 *    | 2/2007  | Chen                                  | G02B 6/0043<br>362/613 |
| 7,208,678 B2      | 4/2007  | Shinmura et al.                       |                        |
| D570,025 S        | 5/2008  | Walker                                |                        |
| D579,879 S *      | 11/2008 | Wegner                                | D13/152                |
| 7,488,093 B1      | 2/2009  | Huang et al.                          |                        |
| 7,626,118 B1 *    | 12/2009 | Capozzi                               | H02G 3/088<br>174/64   |
| D609,384 S        | 2/2010  | Gray et al.                           |                        |
| D629,365 S *      | 12/2010 | Garcia De Vicuna                      | D13/184                |
| D632,654 S *      | 2/2011  | Davidson                              | D13/152                |
| 8,310,158 B2      | 11/2012 | Coplin et al.                         |                        |
| D678,845 S *      | 3/2013  | Singer                                | D13/152                |
| D679,437 S        | 4/2013  | Watt                                  |                        |
| 8,471,145 B2      | 6/2013  | Suzuki                                |                        |
| 8,475,031 B1      | 7/2013  | Chen                                  |                        |
| 8,479,455 B2 *    | 7/2013  | Schaefer                              | H02G 3/088<br>52/220.8 |
| 8,505,224 B2      | 7/2013  | Huang                                 |                        |
| 8,545,035 B1      | 10/2013 | Beguin et al.                         |                        |
| D695,442 S *      | 12/2013 | Speier                                | D26/74                 |
| 8,662,687 B2      | 3/2014  | Weber et al.                          |                        |
| 8,875,455 B1      | 11/2014 | Yang et al.                           |                        |
| 8,905,569 B2      | 12/2014 | Thomas et al.                         |                        |
| D722,975 S        | 2/2015  | Debone et al.                         |                        |
| 9,010,980 B2      | 4/2015  | Hu et al.                             |                        |
| D736,105 S *      | 8/2015  | Hoyt                                  | D10/64                 |
| 9,496,697 B1      | 11/2016 | Wentworth                             |                        |
| D777,678 S *      | 1/2017  | Brooks, Sr.                           | D13/152                |
| 9,612,382 B2      | 4/2017  | Chechang et al.                       |                        |
| 9,742,173 B2      | 8/2017  | Wentworth                             |                        |
| 9,819,166 B1      | 11/2017 | Capozzi                               |                        |
| D810,699 S *      | 2/2018  | Velez                                 | D13/156                |
| 10,024,061 B2     | 7/2018  | Ainger                                |                        |
| D837,666 S        | 1/2019  | Butler et al.                         |                        |
| D840,951 S        | 2/2019  | Gattis                                |                        |
| 10,230,227 B1 *   | 3/2019  | Wade                                  | H02G 3/14              |
| D883,208 S        | 5/2020  | Dong                                  |                        |
| D887,366 S        | 6/2020  | Madathil Sankarankutty Nair<br>et al. |                        |
| D903,596 S        | 12/2020 | Nielson et al.                        |                        |
| D905,890 S        | 12/2020 | Liu                                   |                        |
| D909,320 S *      | 2/2021  | von der Lippe                         | D13/184                |
| 10,935,211 B2     | 3/2021  | Castillo et al.                       |                        |
| D917,400 S *      | 4/2021  | Wade                                  | D13/152                |
| D925,483 S        | 7/2021  | Elaschuk et al.                       |                        |
| D926,703 S *      | 8/2021  | Yang                                  | H02G 3/081<br>D13/152  |
| D928,723 S        | 8/2021  | Weinerman et al.                      |                        |
| D929,399 S        | 8/2021  | Huang                                 |                        |
| D933,017 S *      | 10/2021 | Jackson                               | D13/152                |
| D933,018 S *      | 10/2021 | Jackson                               | D13/152                |
| D933,590 S        | 10/2021 | Wu et al.                             |                        |
| D936,276 S        | 11/2021 | Carskadon et al.                      |                        |
| D937,788 S        | 12/2021 | Doyle et al.                          |                        |
| D938,364 S        | 12/2021 | Ennis                                 |                        |
| D939,467 S        | 12/2021 | Kola et al.                           |                        |
| D950,489 S *      | 5/2022  | Choi                                  | D13/108                |
| D961,563 S *      | 8/2022  | Homza                                 | D14/242                |
| D966,199 S *      | 10/2022 | Yang                                  | H02S 20/23<br>D13/152  |
| 2008/0031011 A1   | 2/2008  | Hayashi et al.                        |                        |
| 2008/0037284 A1   | 2/2008  | Rudisill                              |                        |
| 2008/0112186 A1   | 5/2008  | Jung et al.                           |                        |
| 2010/0079980 A1   | 4/2010  | Sakai                                 |                        |
| 2010/0133422 A1   | 6/2010  | Lin et al.                            |                        |
| 2010/0208460 A1   | 8/2010  | Ladewig et al.                        |                        |
| 2010/0302803 A1   | 12/2010 | Bitá et al.                           |                        |
| 2011/0013397 A1   | 1/2011  | Catone et al.                         |                        |
| 2011/0122616 A1   | 5/2011  | Hochstein                             |                        |
| 2011/0187273 A1   | 8/2011  | Summerford et al.                     |                        |
| 2011/0317436 A1   | 12/2011 | Kuan et al.                           |                        |
| 2012/0051041 A1   | 3/2012  | Edmond et al.                         |                        |
| 2012/0152490 A1   | 6/2012  | Wen et al.                            |                        |
| 2012/0212957 A1   | 8/2012  | Hyun et al.                           |                        |
| 2012/0230019 A1   | 9/2012  | Peifer                                |                        |
| 2012/0257383 A1   | 10/2012 | Zhang                                 |                        |
| 2013/0063979 A1   | 3/2013  | Chen et al.                           |                        |
| 2013/0077345 A1   | 3/2013  | Sato et al.                           |                        |
| 2013/0107528 A1   | 5/2013  | Boyer et al.                          |                        |
| 2013/0250584 A1   | 9/2013  | Wang et al.                           |                        |
| 2014/0211504 A1   | 7/2014  | Yuan et al.                           |                        |
| 2014/0334126 A1   | 11/2014 | Speier et al.                         |                        |
| 2014/0355302 A1   | 12/2014 | Wilcox et al.                         |                        |
| 2015/0109820 A1   | 4/2015  | Wilcox et al.                         |                        |
| 2015/0198760 A1   | 7/2015  | Wilcox et al.                         |                        |
| 2017/0110863 A1   | 4/2017  | Wentworth                             |                        |
| 2018/0150808 A1 * | 5/2018  | Haley                                 | G06F 16/1794           |

## OTHER PUBLICATIONS

QBox Installation Manual, Quick Mount PV, Aug. 2017, 16 pages.  
Soladeck Products, UL50 Type 3R Enclosure & UL 1741 Combiner/  
Enclosure | PV Solar Panels, <https://web.archive.org/web/20121015103518/http://www.rstcenterprises.com/soladeck/products/index.phtml>, Oct. 15, 2012, printed Jul. 21, 2023.

\* cited by examiner

