



US00D798419S

(12) **United States Design Patent** (10) **Patent No.:** **US D798,419 S**
Gehrung et al. (45) **Date of Patent:** **** Sep. 26, 2017**

(54) **PAINT SPRAY GUN**

552,213 A 12/1895 Troy
552,715 A 1/1896 Lugrin
563,505 A 7/1896 McCormack
581,107 A 4/1897 Emery
(Continued)

(71) Applicant: **SATA GmbH & Co. KG,**
Kornwestheim (DE)

(72) Inventors: **Ralf Gehrung,** Stuttgart (DE);
Albrecht Kruse, Stuttgart (DE)

(73) Assignee: **SATA GmbH & Co. KG,**
Kornwestheim (DE)

(**) Term: **15 Years**

(21) Appl. No.: **29/579,824**

(22) Filed: **Oct. 4, 2016**

FOREIGN PATENT DOCUMENTS

AT 153883 6/1997
AT 163577 3/1998
(Continued)

OTHER PUBLICATIONS

International Search Report, Written Opinion and International Preliminary Report on Patentability for PCT/EP2004/005381 file May 19, 2004.

(Continued)

Related U.S. Application Data

(62) Division of application No. 29/516,082, filed on Jan. 29, 2015, now Pat. No. Des. 770,593.

(30) **Foreign Application Priority Data**

Jul. 31, 2014 (CN) 2014 3 0266803

(51) **LOC (10) Cl.** **23-01**

(52) **U.S. Cl.**
USPC **D23/226**

(58) **Field of Classification Search**

USPC D23/213, 223, 226
CPC B05B 5/0533; B05B 5/1691; B05B 5/043;
B05B 7/241; B05B 7/2408

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

40,433 A 10/1863 Sees
327,260 A 9/1885 Hart
459,432 A 9/1891 Anderson
459,433 A 9/1891 Avery
548,816 A 10/1895 Paul

Primary Examiner — Robin V Webster

(74) *Attorney, Agent, or Firm* — Paul D. Bianco; Lourdes Perez; Fleit Gibbons Gutman Bongini & Bianco PL

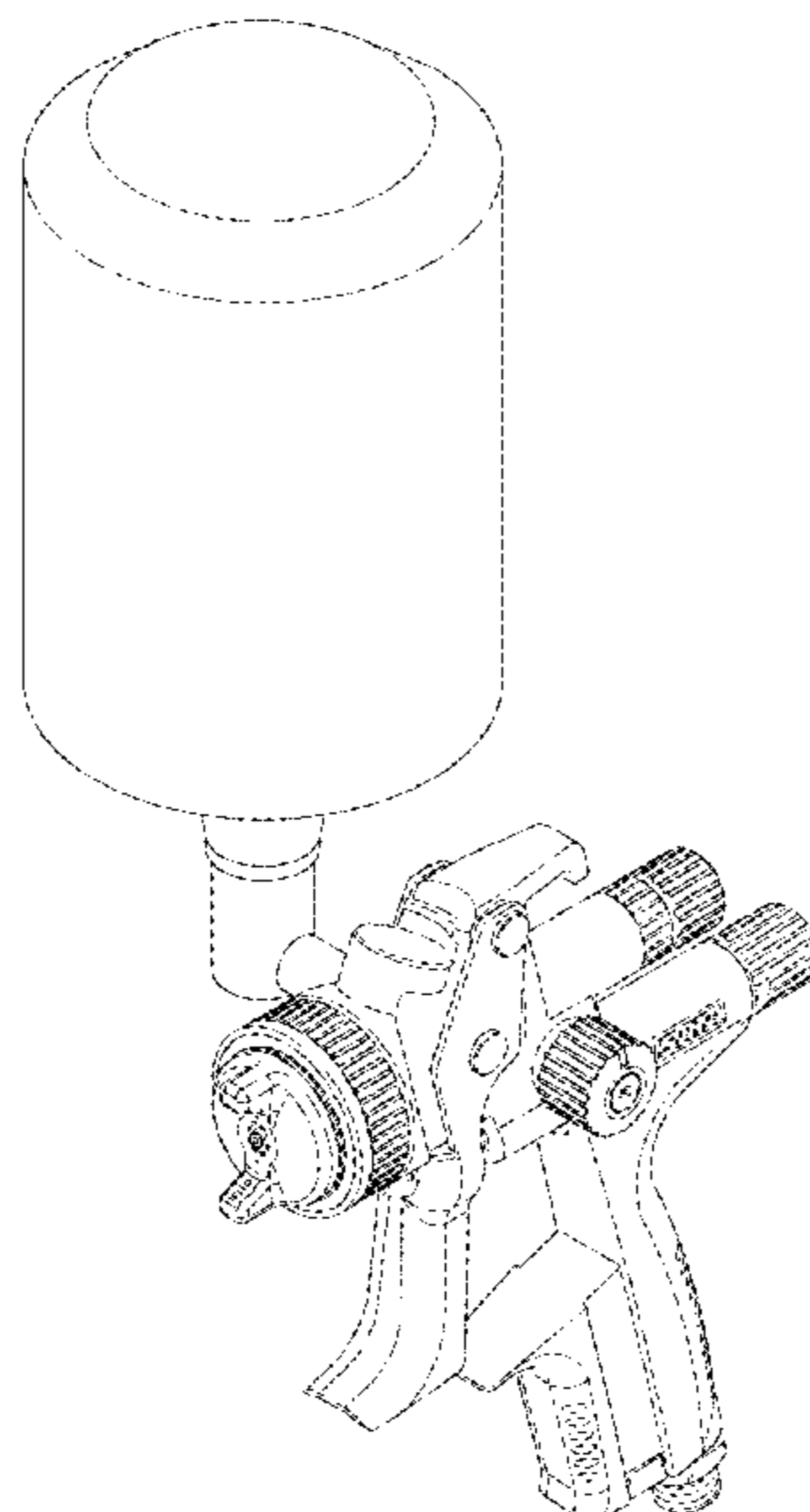
(57) **CLAIM**

The ornamental design for a paint spray gun, as shown and described.

DESCRIPTION

FIG. 1 is a first perspective view of a paint spray gun according to the present invention;
FIG. 2 is a second perspective view of the paint spray gun of FIG. 1;
FIG. 3 is a back view of the paint spray gun of FIG. 1;
FIG. 4 is a first side view of the paint spray gun of FIG. 1;
FIG. 5 is a top view of the paint spray gun of FIG. 1;
FIG. 6 is a second side view of the paint spray gun of FIG. 1;
FIG. 7 is a bottom view of the paint spray gun of FIG. 1; and,
FIG. 8 is a front view of the paint spray gun of FIG. 1.

1 Claim, 8 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

| | | | | | |
|-------------|---------|-----------------|-------------|---------|-------------------|
| 644,803 A | 3/1900 | Justi | 4,614,300 A | 9/1986 | Falcoff |
| 672,012 A | 4/1901 | Ruper | 4,643,330 A | 2/1987 | Kennedy |
| 574,880 A | 5/1901 | Schmidt et al. | 4,653,661 A | 3/1987 | Buchner et al. |
| 1,662,496 A | 3/1928 | Forsgard | 4,667,878 A | 5/1987 | Behr |
| 1,703,383 A | 2/1929 | Birkenmaier | 4,713,257 A | 12/1987 | Luttermoeller |
| 1,703,384 A | 2/1929 | Birkenmaier | D293,950 S | 1/1988 | Ogden et al. |
| 1,711,221 A | 4/1929 | Blakeslee | 4,730,753 A | 3/1988 | Grime |
| 1,751,787 A | 3/1930 | Binks | 4,767,057 A | 8/1988 | Degli et al. |
| 1,889,201 A | 11/1932 | Holveck | D298,372 S | 11/1988 | Taylor, Jr. |
| 2,008,381 A | 7/1935 | Beeg | 4,784,184 A | 11/1988 | Gates |
| 2,049,700 A | 8/1936 | Gustafsson | 4,806,736 A | 2/1989 | Schirico |
| 2,051,210 A | 8/1936 | Gustafsson | 4,826,539 A | 5/1989 | Harpold |
| 2,070,696 A | 2/1937 | Tracy | 4,832,232 A | 5/1989 | Broccoli |
| 2,116,036 A | 5/1938 | Money | 4,863,781 A | 9/1989 | Kronzer |
| 2,125,445 A | 8/1938 | Holveck | 4,877,144 A | 10/1989 | Thanisch |
| 2,198,441 A | 4/1940 | Mollart | D305,057 S | 12/1989 | Morgan |
| 2,204,599 A | 6/1940 | Jenkins | 4,887,747 A | 12/1989 | Ostrowsky et al. |
| 2,269,057 A | 1/1942 | Jenkins | 4,901,761 A | 2/1990 | Taylor |
| D133,223 S | 7/1942 | Tammen | 4,906,151 A | 3/1990 | Kubis |
| 2,356,865 A | 8/1944 | Mason | 4,917,300 A | 4/1990 | Gloviak et al. |
| 2,416,856 A | 3/1947 | Thomsen | 4,946,075 A | 8/1990 | Lundback |
| 2,416,923 A | 3/1947 | Jenkins | 4,964,361 A | 10/1990 | Aebersold |
| 2,557,593 A | 6/1951 | Bjorkman | 4,967,600 A | 11/1990 | Keller |
| 2,557,606 A | 6/1951 | Liedberg | 4,969,603 A | 11/1990 | Norman |
| 2,559,091 A | 7/1951 | Reasenber | 4,973,184 A | 11/1990 | La Salle |
| 2,609,961 A | 9/1952 | Sapien | D314,421 S | 2/1991 | Tajima et al. |
| 2,612,899 A | 10/1952 | Webb | D314,588 S | 2/1991 | Denham |
| 2,646,314 A | 7/1953 | Peeps | 4,989,787 A | 2/1991 | Nikkel et al. |
| 2,721,004 A | 10/1955 | Schultz | 5,020,700 A | 6/1991 | Krzywdziak et al. |
| 2,844,267 A | 7/1958 | Petriccione | D318,877 S | 8/1991 | Miranda et al. |
| 2,886,252 A | 5/1959 | Ehrensperger | 5,042,840 A | 8/1991 | Rieple et al. |
| 3,090,530 A | 5/1963 | Peeps | D321,597 S | 11/1991 | Cerny |
| D196,477 S | 10/1963 | Kelly | 5,064,119 A | 11/1991 | Mellette |
| 3,159,472 A | 12/1964 | Revell | 5,071,074 A | 12/1991 | Lind |
| D200,594 S | 3/1965 | Sass | 5,074,334 A | 12/1991 | Onodera |
| 3,240,398 A | 3/1966 | Dalton, Jr. | 5,078,323 A | 1/1992 | Frank |
| D204,306 S | 4/1966 | Hamm | 5,080,285 A | 1/1992 | Toth |
| D205,760 S | 9/1966 | Hocutt et al. | 5,088,648 A | 2/1992 | Schmon |
| D208,903 S | 10/1967 | Zadron et al. | 5,090,623 A | 2/1992 | Burns et al. |
| 3,344,992 A | 10/1967 | Norris | 5,102,045 A | 4/1992 | Diana |
| 3,381,845 A | 5/1968 | MacDonald | 5,119,992 A | 6/1992 | Grime |
| 3,417,650 A | 12/1968 | Varrin | 5,125,391 A | 6/1992 | Srivastava et al. |
| 3,420,106 A | 1/1969 | Keller et al. | 5,135,124 A | 8/1992 | Wobser |
| 3,435,683 A | 4/1969 | Keller et al. | 5,143,102 A | 9/1992 | Blaul |
| 3,482,781 A | 12/1969 | Sharpe | 5,165,605 A | 11/1992 | Morita et al. |
| D217,928 S | 6/1970 | Felske | 5,170,941 A | 12/1992 | Morita et al. |
| 3,524,589 A | 8/1970 | Pelton, Jr. | 5,190,219 A | 3/1993 | Copp, Jr. |
| 3,527,372 A | 9/1970 | Manning | 5,191,797 A | 3/1993 | Smith |
| 3,583,632 A | 6/1971 | Schaffer | 5,228,488 A | 7/1993 | Fletcher |
| 3,622,078 A | 11/1971 | Gronert | 5,232,299 A | 8/1993 | Hiss |
| 3,645,562 A | 2/1972 | Fandetti et al. | 5,236,128 A | 8/1993 | Morita et al. |
| 3,656,493 A | 4/1972 | Black et al. | 5,249,746 A | 10/1993 | Kaneko et al. |
| 3,714,967 A | 2/1973 | Zupan et al. | D341,186 S | 11/1993 | Albers |
| 3,746,253 A | 7/1973 | Walberg | 5,289,974 A | 3/1994 | Grime et al. |
| 3,747,850 A | 7/1973 | Hastings et al. | 5,322,221 A | 6/1994 | Anderson |
| 3,771,539 A | 11/1973 | De Santis | 5,325,473 A | 6/1994 | Monroe et al. |
| 3,840,143 A | 10/1974 | Davis et al. | 5,332,156 A | 7/1994 | Wheeler |
| 3,848,807 A | 11/1974 | Partida | 5,333,506 A | 8/1994 | Smith et al. |
| 3,857,511 A | 12/1974 | Govindan | 5,333,908 A | 8/1994 | Dorney et al. |
| 3,870,223 A | 3/1975 | Wyant | 5,344,078 A | 9/1994 | Fritz et al. |
| 3,873,023 A | 3/1975 | Moss et al. | 5,367,148 A | 11/1994 | Storch et al. |
| 4,000,915 A | 1/1977 | Strom | D353,836 S | 12/1994 | Carvelli et al. |
| D245,048 S | 7/1977 | Pool | 5,381,962 A | 1/1995 | Teague |
| D252,097 S | 6/1979 | Probst et al. | 5,435,491 A | 7/1995 | Sakuma |
| 4,160,525 A | 7/1979 | Wagner | 5,443,642 A | 8/1995 | Bienduga |
| 4,210,263 A | 7/1980 | Bos | 5,456,414 A | 10/1995 | Burns et al. |
| 4,273,293 A | 6/1981 | Hastings | D365,952 S | 1/1996 | Gagnon et al. |
| 4,411,387 A | 10/1983 | Stern et al. | 5,503,439 A | 4/1996 | LaJeunesse et al. |
| 4,478,370 A | 10/1984 | Hastings | 5,533,674 A | 7/1996 | Feyrer et al. |
| D276,472 S | 11/1984 | Harrison | 5,540,385 A | 7/1996 | Garlick |
| D278,543 S | 4/1985 | Gintz | 5,540,386 A | 7/1996 | Roman |
| 4,545,536 A | 10/1985 | Avidon | D376,637 S | 12/1996 | Kieffer |
| 4,562,965 A | 1/1986 | Ihmels et al. | 5,582,350 A | 12/1996 | Kosmyna et al. |
| 4,580,035 A | 4/1986 | Luscher | 5,584,899 A | 12/1996 | Shorts |
| 4,585,168 A | 4/1986 | Even et al. | 5,588,562 A | 12/1996 | Sander et al. |
| | | | 5,592,597 A | 1/1997 | Kiss |
| | | | 5,609,302 A | 3/1997 | Smith |
| | | | 5,613,637 A | 3/1997 | Schmon |
| | | | D380,301 S | 7/1997 | Kogutt |

US D798,419 S

(56)

References Cited

U.S. PATENT DOCUMENTS

| | | | | | |
|----------------|---------|----------------------------------|-----------------|---------|-------------------------------|
| D615,586 S | 5/2010 | Kudimi | D768,820 S | 10/2016 | Binz |
| D616,022 S | 5/2010 | Kudimi | D770,593 S | 11/2016 | Gehrung |
| D616,527 S | 5/2010 | Anderson et al. | 9,492,799 B1 * | 11/2016 | Villasenor B01F 7/00208 |
| 7,765,876 B1 | 8/2010 | Chen | 2001/0004996 A1 | 6/2001 | Schmon |
| D624,668 S | 9/2010 | Noppe | 2001/0040192 A1 | 11/2001 | Kaneko et al. |
| 7,810,744 B2 | 10/2010 | Schmon et al. | 2002/0134861 A1 | 9/2002 | Petrie et al. |
| 7,819,341 B2 | 10/2010 | Schmon et al. | 2002/0148501 A1 | 10/2002 | Shieh |
| D627,039 S | 11/2010 | Yu | 2002/0170978 A1 | 11/2002 | Mohn |
| D627,432 S | 11/2010 | Escoto et al. | 2003/0025000 A1 | 2/2003 | Schmon et al. |
| 7,823,806 B2 | 11/2010 | Schmon | 2003/0066218 A1 | 4/2003 | Schweikert |
| D629,623 S | 12/2010 | Lampe | 2003/0121476 A1 | 7/2003 | McIntyre et al. |
| 7,856,940 B2 | 12/2010 | Wendler | 2003/0127046 A1 | 7/2003 | Zehner et al. |
| 7,913,938 B2 | 3/2011 | Cooper | 2003/0164408 A1 | 9/2003 | Schmon |
| 7,922,107 B2 | 4/2011 | Fox | 2003/0177979 A1 | 9/2003 | Crum et al. |
| D637,269 S | 5/2011 | Wang | 2003/0189105 A1 | 10/2003 | Schmon |
| D638,121 S | 5/2011 | Villasana | 2003/0209568 A1 | 11/2003 | Douglas et al. |
| D639,863 S | 6/2011 | Langan | 2003/0213857 A1 | 11/2003 | Schmon et al. |
| D641,067 S | 7/2011 | Wang | 2003/0218596 A1 | 11/2003 | Eschler |
| D644,716 S | 9/2011 | Gehrung | 2003/0230636 A1 | 12/2003 | Rogers |
| D644,803 S | 9/2011 | Schmon | 2004/0046051 A1 | 3/2004 | Santa Cruz et al. |
| D645,094 S | 9/2011 | Langan | 2004/0050432 A1 | 3/2004 | Breda |
| 8,042,402 B2 | 10/2011 | Brown et al. | 2004/0104194 A1 | 6/2004 | Dennison |
| D649,196 S | 11/2011 | Langan | 2004/0129738 A1 | 7/2004 | Stukas |
| 8,052,071 B2 | 11/2011 | Kruse | 2004/0140373 A1 | 7/2004 | Joseph et al. |
| 8,066,205 B2 * | 11/2011 | Bass B05B 7/066 239/337 | 2004/0155063 A1 | 8/2004 | Hofeldt |
| D655,347 S | 3/2012 | Gehrung | 2004/0177890 A1 | 9/2004 | Weinmann |
| 8,127,963 B2 | 3/2012 | Gerson et al. | 2004/0191406 A1 | 9/2004 | Crum et al. |
| D657,276 S | 4/2012 | Brose | 2004/0217201 A1 | 11/2004 | Ruda |
| D661,492 S | 6/2012 | Ranschau | 2004/0233223 A1 | 11/2004 | Schkolne et al. |
| D661,742 S | 6/2012 | Clark | 2004/0245208 A1 | 12/2004 | Dennison |
| D663,960 S | 7/2012 | Jeronimo | 2005/0056613 A1 | 3/2005 | King |
| 8,225,892 B2 | 7/2012 | Ben-Tzvi | 2005/0082249 A1 | 4/2005 | King |
| D664,773 S | 8/2012 | Papin | 2005/0127201 A1 | 6/2005 | Matsumoto |
| 8,240,579 B1 | 8/2012 | Bennett | 2005/0145723 A1 | 7/2005 | Blette et al. |
| 8,297,536 B2 | 10/2012 | Ruda | 2005/0145724 A1 | 7/2005 | Blette et al. |
| D670,085 S | 11/2012 | Brookman | 2005/0178854 A1 | 8/2005 | Dodd |
| D671,988 S | 12/2012 | Leipold | 2005/0220943 A1 | 10/2005 | Abrams et al. |
| D672,012 S | 12/2012 | Brose | 2005/0248148 A1 | 11/2005 | Schenck et al. |
| D674,880 S | 1/2013 | Schmon | 2005/0252993 A1 | 11/2005 | Rogers |
| 8,352,744 B2 | 1/2013 | Kruse | 2005/0252994 A1 | 11/2005 | Rogers |
| 8,360,345 B2 | 1/2013 | Micheli | 2005/0268949 A1 | 12/2005 | Rosa |
| D681,162 S | 4/2013 | Kruse | 2005/0284963 A1 | 12/2005 | Reedy |
| 8,444,067 B2 | 5/2013 | Schmon et al. | 2006/0000927 A1 | 1/2006 | Ruda |
| 8,454,759 B2 | 6/2013 | Selsvik | 2006/0007123 A1 | 1/2006 | Wilson et al. |
| 8,481,124 B2 | 7/2013 | Nolte et al. | 2006/0048803 A1 | 3/2006 | Jessup et al. |
| D689,590 S | 9/2013 | Brose | 2006/0081060 A1 | 4/2006 | Forster |
| D689,593 S | 9/2013 | Schmon | 2006/0113409 A1 | 6/2006 | Camilleri et al. |
| D690,799 S | 10/2013 | Maier | 2006/0171771 A1 | 8/2006 | Kruse |
| D692,530 S | 10/2013 | Gehrung | 2006/0192377 A1 | 8/2006 | Bauer et al. |
| D692,532 S | 10/2013 | Li et al. | 2006/0196891 A1 | 9/2006 | Gerson et al. |
| 8,616,434 B2 | 12/2013 | Wilen | 2007/0029788 A1 | 2/2007 | Adler |
| D697,584 S | 1/2014 | Schmon | 2007/0055883 A1 | 3/2007 | Kruse |
| D698,008 S | 1/2014 | Schmon et al. | 2007/0131795 A1 | 6/2007 | Abbate et al. |
| 8,626,674 B2 | 1/2014 | Whitehouse | 2007/0158349 A1 | 7/2007 | Schmon et al. |
| 8,642,131 B2 | 2/2014 | Nolte et al. | 2007/0205305 A1 | 9/2007 | Vagedes |
| D704,300 S * | 5/2014 | Li D23/225 | 2007/0221754 A1 | 9/2007 | Gehrung |
| 8,757,182 B2 | 6/2014 | Schmon | 2007/0252378 A1 | 11/2007 | Chambers |
| 8,807,460 B2 | 8/2014 | Charpie et al. | 2008/0011879 A1 | 1/2008 | Gerson et al. |
| 8,857,732 B2 | 10/2014 | Brose | 2008/0019789 A1 | 1/2008 | Dunaway et al. |
| D720,015 S | 12/2014 | Kruse | 2008/0029619 A1 | 2/2008 | Gohring et al. |
| D720,041 S | 12/2014 | Robinson | 2008/0128533 A1 | 6/2008 | Gehrung |
| 8,899,501 B2 | 12/2014 | Fox et al. | 2008/0179763 A1 | 7/2008 | Schmon et al. |
| D721,785 S | 1/2015 | Gehrung | 2008/0251977 A1 | 10/2008 | Naruse et al. |
| 8,925,836 B2 | 1/2015 | Dettlaff | 2008/0264892 A1 | 10/2008 | Nozawa |
| D733,369 S | 6/2015 | Tschan | 2008/0272213 A1 | 11/2008 | Ting |
| D733,453 S | 7/2015 | Tschan | 2008/0296410 A1 | 12/2008 | Carey et al. |
| D734,571 S | 7/2015 | Tschan | 2009/0014557 A1 | 1/2009 | Schmon et al. |
| 9,073,068 B2 | 7/2015 | Krayer et al. | 2009/0026290 A1 | 1/2009 | Fox |
| D737,126 S | 8/2015 | Tschan | 2009/0045623 A1 | 2/2009 | Schmon |
| D740,393 S | 10/2015 | Gehrung | 2009/0072050 A1 | 3/2009 | Ruda |
| D745,636 S | 12/2015 | Lin | 2009/0078789 A1 | 3/2009 | Kruse |
| D757,216 S * | 5/2016 | Gehrung D23/225 | 2009/0078790 A1 | 3/2009 | Camilleri et al. |
| D758,533 S | 6/2016 | Dettlaff | 2009/0143745 A1 | 6/2009 | Langan et al. |
| D758,537 S | 6/2016 | Gehrung | 2009/0183516 A1 | 7/2009 | Appler et al. |
| | | | 2009/0235864 A1 | 9/2009 | Khoury et al. |
| | | | 2009/0266915 A1 | 10/2009 | Fedorov |
| | | | 2010/0021646 A1 | 1/2010 | Nolte et al. |
| | | | 2010/0059533 A1 | 3/2010 | Unger et al. |
| | | | 2010/0084493 A1 | 4/2010 | Troudt |

(56)

References Cited

U.S. PATENT DOCUMENTS

2010/0108783 A1 5/2010 Joseph et al.
 2010/0126541 A1 5/2010 Schmon
 2010/0206963 A1 8/2010 Huang
 2011/0024524 A1 2/2011 Fox
 2011/0121103 A1 5/2011 Carleton et al.
 2011/0125607 A1 5/2011 Wilen
 2011/0127767 A1 6/2011 Wicks et al.
 2011/0168811 A1 7/2011 Fox et al.
 2011/0174901 A1 7/2011 Dettlaff et al.
 2012/0012671 A1 1/2012 Brose et al.
 2012/0097762 A1 4/2012 Gehrung et al.
 2012/0132550 A1 5/2012 Gerson et al.
 2012/0160935 A1 6/2012 Krayer et al.
 2012/0187220 A1 7/2012 Micheli et al.
 2013/0056556 A1 3/2013 Schmon et al.
 2013/0074864 A1 3/2013 Nuzzo et al.
 2013/0266734 A1 10/2013 Nolte et al.
 2013/0320110 A1 12/2013 Brose et al.
 2014/0048627 A1 2/2014 Schmon et al.
 2014/0059905 A1 3/2014 Raming
 2014/0145003 A1 5/2014 Schmon et al.
 2014/0305962 A1 10/2014 Tschan
 2015/0165463 A1 6/2015 Gehrung
 2015/0231655 A1 8/2015 Adams et al.
 2016/0030960 A1 2/2016 Gehrung

FOREIGN PATENT DOCUMENTS

AT 250467 10/2003
 AT 322645 4/2006
 AT 383910 2/2008
 AT 461752 4/2010
 AT 461753 4/2010
 AT 475488 8/2010
 AU 637187 5/1993
 AU 2002352235 9/2003
 AU 2004315547 8/2005
 AU 2005205899 8/2005
 AU 2011257605 11/2012
 AU 2011361295 5/2013
 CA 521511 2/1956
 CA 2126957 1/1995
 CA 2277096 7/1998
 CA 2445183 10/2002
 CA 2552390 8/2005
 CA 2555607 8/2005
 CA 2690112 5/2009
 CA 2797990 12/2011
 CA 2812684 9/2012
 CA 102917803 2/2013
 CA 2850401 A1 5/2013
 CH 203 668 6/1939
 CH 542104 A 9/1973
 CH 676208 12/1990
 CN 2136077 Y 6/1993
 CN 1902002 1/2007
 CN 1909970 2/2007
 CN 1909971 2/2007
 CN 1917960 2/2007
 CN 200954482 10/2007
 CN 101125316 2/2008
 CN 100430150 11/2008
 CN 100455360 1/2009
 CN 101367066 2/2009
 CN 100478080 4/2009
 CN 101646500 2/2010
 CN 102211070 4/2011
 CN 102211069 10/2011
 DE 460381 5/1928
 DE 510362 10/1930
 DE 1425890 11/1968
 DE 2559036 9/1976
 DE 2653981 6/1978
 DE 2950341 7/1980
 DE 3016419 11/1981

DE 8024829.9 9/1982
 DE 34 02 097 8/1985
 DE 3402945 A1 8/1985
 DE 3517122 5/1986
 DE 3505618 8/1986
 DE 3526819 2/1987
 DE 3016419 C2 8/1987
 DE 8702559 10/1987
 DE 3708472 A1 10/1988
 DE 8902223 5/1989
 DE 3742308 6/1989
 DE 8905681 11/1989
 DE G 90 01 265 5/1990
 DE 3906219 8/1990
 DE 4302911 8/1993
 DE 4230535 3/1994
 DE 4321940 1/1995
 DE 19516485 11/1996
 DE 19727884 2/1999
 DE 69505433 T2 4/1999
 DE 19807973 7/1999
 DE 19824264 12/1999
 DE 19832990 1/2000
 DE 20000483 8/2000
 DE 10004105 10/2000
 DE 19958569 2/2001
 DE 199 41 362 3/2001
 DE 199 45 760 3/2001
 DE 19945760 3/2001
 DE 10031857 1/2002
 DE 10031858 1/2002
 DE 20114257 2/2002
 DE 10059406 6/2002
 DE 10135104 9/2002
 DE 102 05 831 8/2003
 DE 03069208 A1 8/2003
 DE 10205831 8/2003
 DE 10311238 10/2004
 DE 10 2004 027 789 2/2005
 DE 10 2004 027789 2/2005
 DE 29825120 2/2005
 DE 2004027789 A1 2/2005
 DE 20320781 6/2005
 DE 10 2004 014 646 7/2005
 DE 10 2004 003 438 8/2005
 DE 102004003439 8/2005
 DE 10 2004 007 733 9/2005
 DE 10 2004 021 298 11/2005
 DE 69535077 T2 11/2006
 DE 202007001031 3/2007
 DE 60200500 1173 8/2007
 DE 60206956 T2 8/2008
 DE 102007006547 8/2008
 DE 102007039106 2/2009
 DE 102007052067 5/2009
 DE 20 2010 012 449 U1 12/2010
 DE 202010012449 12/2010
 DE 102009053449 2/2011
 DE 102010060086 4/2012
 DE 102011106060 1/2013
 DE 102011118120 5/2013
 EP 0092392 10/1983
 EP 524408 1/1993
 EP 567325 10/1993
 EP 0631821 1/1995
 EP 0650766 5/1995
 EP 678334 10/1995
 EP 0706832 4/1996
 EP 0710506 5/1996
 EP 801002 10/1997
 EP 987060 3/2000
 EP 1081639 3/2001
 EP 1106262 6/2001
 EP 1247586 10/2002
 EP 1277519 1/2003
 EP 1294490 3/2003
 EP 1299194 4/2003
 EP 1366823 12/2003
 EP 1412669 4/2004

(56)

References Cited

FOREIGN PATENT DOCUMENTS

| | | |
|----|---------------|---------|
| EP | 1424135 | 6/2004 |
| EP | 1477232 A1 | 11/2004 |
| EP | 1479447 A1 | 11/2004 |
| EP | 1504823 A1 | 2/2005 |
| EP | 1563913 | 8/2005 |
| EP | 1574262 | 9/2005 |
| EP | 1602412 | 12/2005 |
| EP | 1658902 A1 | 5/2006 |
| EP | 1708822 | 10/2006 |
| EP | 1708823 | 10/2006 |
| EP | 1718415 | 11/2006 |
| EP | 1880771 A1 | 1/2008 |
| EP | 1902766 A1 | 3/2008 |
| EP | 1902786 | 3/2008 |
| EP | 1902876 | 3/2008 |
| EP | 1930084 | 6/2008 |
| EP | 1964616 | 9/2008 |
| EP | 1964616 A2 | 9/2008 |
| EP | 1997561 A2 | 12/2008 |
| EP | 2017010 A2 | 1/2009 |
| EP | 2027931 | 2/2009 |
| EP | 2106298 | 10/2009 |
| EP | 2111920 | 10/2009 |
| EP | 2490819 | 8/2012 |
| EP | 2576079 | 4/2013 |
| EP | 2608890 | 7/2013 |
| EP | 2703089 A1 | 3/2014 |
| FR | 398333 | 6/1909 |
| FR | 789762 | 11/1935 |
| FR | 1410519 | 9/1964 |
| FR | 2444501 | 7/1980 |
| FR | 2462200 A1 | 2/1981 |
| FR | 2 570 140 | 3/1986 |
| FR | 2 774 928 | 8/1999 |
| FR | 2927824 A1 | 8/2009 |
| GB | 190900523 | 0/1909 |
| GB | 2 132 916 | 7/1984 |
| GB | 2153260 | 8/1985 |
| GB | 2372465 | 8/2002 |
| GB | 2411235 | 8/2005 |
| HK | 1100405 | 6/2009 |
| HK | 1096057 | 7/2009 |
| HK | 1125067 | 8/2012 |
| HK | 1138533 | 11/2012 |
| JP | S49-136868 U | 11/1974 |
| JP | S55-107258 U | 7/1980 |
| JP | S5654328 | 5/1981 |
| JP | S57-75246 | 5/1982 |
| JP | S57128346 A | 8/1982 |
| JP | 58-119862 | 5/1983 |
| JP | S5998757 | 6/1984 |
| JP | S601722 | 1/1985 |
| JP | H01-87805 | 6/1989 |
| JP | H0530749 | 4/1993 |
| JP | H05172678 | 7/1993 |
| JP | 674850 | 3/1994 |
| JP | H06215741 | 8/1994 |
| JP | H08196950 | 8/1996 |
| JP | H09117697 | 5/1997 |
| JP | 11-047643 A | 2/1999 |
| JP | 2001259487 | 9/2001 |
| JP | 2003042882 | 2/2002 |
| JP | 2003088780 | 3/2003 |
| JP | 2004017044 | 1/2004 |
| JP | 2005138885 | 6/2005 |
| JP | 2007516831 | 6/2007 |
| JP | 2010-528837 A | 8/2010 |
| TW | 491092 | 6/2002 |
| TW | I220392 | 8/2004 |
| TW | I303587 | 12/2008 |
| TW | I309584 | 5/2009 |
| WO | 90/08456 | 8/1990 |
| WO | 91/16610 | 10/1991 |
| WO | 92/07346 | 4/1992 |
| WO | 9522409 | 8/1995 |

| | | |
|----|----------------|---------|
| WO | 98/32539 | 7/1998 |
| WO | 01/12337 | 2/2001 |
| WO | 0166261 | 9/2001 |
| WO | 01/99062 | 12/2001 |
| WO | 02/00355 | 1/2002 |
| WO | 0202242 | 1/2002 |
| WO | 02/18061 | 3/2002 |
| WO | 02/085533 | 10/2002 |
| WO | 03/007252 | 1/2003 |
| WO | 03/045575 | 6/2003 |
| WO | 03/069208 | 8/2003 |
| WO | 2004/037433 | 5/2004 |
| WO | 2004/052552 | 6/2004 |
| WO | 2005/018815 | 3/2005 |
| WO | 2005/068220 | 7/2005 |
| WO | 2005/070557 | 8/2005 |
| WO | 2005/070558 | 8/2005 |
| WO | 2005/077543 | 8/2005 |
| WO | 2005/115631 | 12/2005 |
| WO | 2006065850 | 6/2006 |
| WO | 2007/128127 | 11/2007 |
| WO | 2007133386 A2 | 11/2007 |
| WO | 2007/149760 A2 | 12/2007 |
| WO | 2009015260 | 1/2009 |
| WO | 2009015260 A2 | 1/2009 |
| WO | 2009056424 | 5/2009 |
| WO | 2010019274 A1 | 2/2010 |
| WO | 2011047876 | 4/2011 |
| WO | 2011147555 | 12/2011 |
| WO | 2012119664 | 9/2012 |
| WO | 2013000524 | 1/2013 |
| WO | 2013016474 | 1/2013 |

OTHER PUBLICATIONS

International Search Report, Written Opinion and International Preliminary Report on Patentability for PCT/EP2004/011998 filed Oct. 23, 2004.

International Search Report, Written Opinion and International Preliminary Report on Patentability for PCT/EP2005/000435 filed Jan. 18, 2005.

International Search Report, Written Opinion and International Preliminary Report on Patentability for PCT/EP2005/00437 filed Jan. 18, 2005.

International Search Report, Written Opinion and International Preliminary Report on Patentability for PCT/EP2008/063344, filed Oct. 6, 2008.

International Search Report, Written Opinion and International Preliminary Report on Patentability for PCT/EP2010/002392 filed Apr. 20, 2010.

International Search Report, Written Opinion and International Preliminary Report on Patentability for PCT/EP2011/002544 filed May 21, 2011.

International Search Report, Written Opinion and International Preliminary Report on Patentability for PCT/EP2011/066665 filed Sep. 26, 2011.

International Search Report, Written Opinion and International Preliminary Report on Patentability for PCT/EP2010/003399 filed Jun. 7, 2010.

International Search Report, Written Opinion and International Preliminary Report on Patentability for PCT/EP2011/5842 filed Dec. 2, 2010.

International Search Report, Written Opinion and International Preliminary Report on Patentability for PCT/EP2012/01939 filed May 5, 2012.

International Search Report, Written Opinion and International Preliminary Report on Patentability for PCT/EP2009/06992 filed Sep. 29, 2009.

Internet Archive Wayback Machine [online] [captured Sep. 25, 2012] [retrieved on Sep. 8, 2014] retrieved from the Internet URL: http://web.archive.org/web/20120925210554/http://www.sata.com/index.php?id=sal-check&no_cache=1&L=11.

JP Office Action issued against JP Patent App. 2012-508926 on Feb. 25, 2014 with English translation.

(56)

References Cited

OTHER PUBLICATIONS

Oanadian Office Action dated Nov. 21, 2012 for related application CA2741703.

Ohinese Search Report dated Dec. 5, 2012 for related application CN200980135429.9.

Ohinese Office Action dated Dec. 13, 2012 for related application CN200980135429.9.

German Search Report for DE 20 2008 014 389.6 completed Jul. 13, 2009.

Office Action dated Nov. 18, 2014 for U.S. Appl. No. 14/113,649.

Notice of Allowance dated Nov. 19, 2014 for U.S. Appl. No. 29/486,223.

Office Action dated Dec. 31, 2014 for U.S. Appl. No. 13/380,949.

Restriction Requirement dated Jan. 9, 2015 for Design U.S. Appl. No. 29/469,049.

Response to Office Action filed Dec. 2, 2014 for U.S. Appl. No. 29/487,679.

Notice of Allowance dated Jan. 15, 2015 for Design U.S. Appl. No. 29/490,620.

Office Action dated Jan. 14, 2015 for Design U.S. Appl. No. 29/447,887.

Hercules Paint Gun Washers brochure publish date Jan. 2012, [online], [site visited Jan. 7, 2015], <http://www.herkules.us/pdfs/L00761-Hercules-Gun_Washers-4-page-brochure.pdf>.

Jetclean GUn Cleaner Terry's Auto Supply, google publish date Aug. 4, 2011, [online], [site visited Jan. 7, 2015], <<http://secure.terrys.net/viewProduct.php?productID=FT.FHAZ1005>>.

Restriction Requirement dated Feb. 6, 2015 for Design U.S. Appl. No. 29/486,232.

Office Action dated Mar. 30, 2015 for U.S. Appl. No. 13/698,417.

Responde to Office Action filed Apr. 14, 2015 to Office Action dated Jan. 14, 2015 for U.S. Appl. No. 29/447,887.

Response filed Jul. 20, 2015 for Office Action dated Mar. 30, 2015 for U.S. Appl. No. 13/698,417.

Notice of Allowance dated Apr. 30, 2015 for U.S. Appl. No. 29/447,887.

Chinese Office Action dated Oct. 28, 2014 and Search Report dared Oct. 15, 2014 for Chinese Application No. 2011800266029.

Australian Examination Report dated Oct. 30, 2012 for Australian Application No. 2010268870.

Notice of Allowance dated Apr. 24, 2015 for Design U.S. Appl. No. 29/486,232.

Restriction Requirement dated Jan. 22, 2015 for U.S. Appl. No. 13/698,417.

Response filed Mar. 23, 2015 to Restriction Requirement dated Jan. 22, 2015 for U.S. Appl. No. 13/698,417.

Response filed Apr. 6, 2015 to Office Action dated Feb. 6, 2015 for Design U.S. Appl. No. 29/486,232.

Response filed Mar. 31, 2015 to Office Action dated Dec. 31, 2014 for U.S. Appl. No. 13/380,949.

Japanese Office Action dated Jun. 11, 2014 for Japanese Patent Application No. 2012-518769.

Australian Examination Report dated Nov. 11, 2014 for Australian patent Application No. 2011257605.

Japanese Notice of Allowance mailed Jan. 13, 2015 for Japanese Patent Application No. 2012/518769.

Application filed Dec. 11, 2011 for U.S. Appl. No. 13/380,949.

Chinese Office Action dated Jan. 28, 2014 and Search Report dated Jan. 21, 2014 for Chinese Application No. 201080030935.4.

Search Report dated Apr. 24, 2010 for German Application No. 10 2009 032 399.6-51.

Application filed Oct. 24, 2013 for U.S. Appl. No. 14/113,649.

Response filed May 18, 2015 to Office Action dated Nov. 18, 2014 for U.S. Appl. No. 14/113,649.

Application filed Dec. 17, 2014 for U.S. Appl. No. 14/572,998.

German Search Report dated Mar. 25, 2014 for German Application No. 202013105779-7.

Application filed Nov. 16, 2012 for U.S. Appl. No. 13/698,417.

Application filed Jun. 2, 2013 for U.S. Appl. No. 13/991,285.

English translation of application filed Aug. 13, 2013 for Application filed Jun. 2, 2013 for U.S. Appl. No. 13/991,285.

Restriction Requirement dated May 27, 2015 for U.S. Appl. No. 13/991,285.

Application filed Jan. 29, 2015 for Design U.S. Appl. No. 29/516,073.

Final Office Action dated Jul. 20, 2015 for U.S. Appl. No. 14/113,649.

Application filed Mar. 3, 2015, 2015 for Design U.S. Appl. No. 29/519,198.

Response to Restriction Requirement filed Jul. 27, 2015 to Restriction Requirement dated May 27, 2015 for U.S. Appl. No. 13/991,285.

Application filed Jul. 31, 2015 for U.S. Appl. No. 14/815,210.

Final Office Action dated Aug. 4, 2015 for U.S. Appl. No. 13/380,949.

Notice of Allowance dated Aug. 3, 2015 for U.S. Appl. No. 29/486,232.

Office Action dated Aug. 7, 2015 for U.S. Appl. No. 13/991,285.

Response filed Oct. 6, 2015 to Notice of Non-Compliant Amendment for U.S. Appl. No. 13/698,417.

Notice of Non-Compliant Amendment dated Aug. 10, 2015 for U.S. Appl. No. 13/698,417.

Final Office Action dated Oct. 16, 2015 for U.S. Appl. No. 13/698,417.

Extended European Search Report dated Apr. 17, 2015 for European Application No. 14004167.4.

Printout from Internet www.ehow.com explaining how to choose a spray gun and stating in item 2 "Nozzle sizes vary between about 1 mm and 2 mm.", printed Sep. 7, 2012.

Printout from Internet www.bodyshopbusiness.com explaining how to choose nozzle setup in paragraph bridging pp. 1 and 2, giving general rule of thumb of nozzle sizes from 1.3 mm to 2.2 mm, depending on material being sprayed, printed Sep. 7, 2012.

Printout from Internet of pages from brochure of Walther Pilot showing nozzle sizes for spray guns ranging from 0.3 mm to 2.5 mm, dated 2007.

Printout from Internet www.alsacorp.com showing in the paragraph bridging pp. 2 and 3, Model VS-7200 Saber LVLP spray gun with nozzle size 1.3 mm with sizes 1.3 to 2.0 available, printed Aug. 26, 2012.

Printout from Internet of p. 28 from current 3Mtm brochure showing Tip/Nozzle/Air Cap Selection Guide with nozzle sizes from 0.5 mm to 3.0 mm.

Decision by EPO regarding opposition proceedings to revoke Patent No. 99926841.0-2425/ 1108476, corresponding to '387 patent, 2012.

SATA News Publication Dan-Am Jul.-Sep. 1996.

SATA News Publication Dan-Am Oct.-Dec. 1996.

SATA News Publication Dan-Am Apr.-Jun. 1998.

Dan-Am SATA Catalog 6 for spray guns 1991.

Dan-Am SATA Catalog 8 for spray guns 1994.

Dan-Am Catalog 6—51pp published 1991.

Japanese Industrial Standards B 9809 English translation, 1992.

Japanese Industrial Standards B 9809 revised Mar. 1, 1991.

SATA News, vol. 21, 2009.

collision Hub TV Document (image from video clip) printed Oct. 9, 2013.

MyRielsMe.com document from press release printed Oct. 9, 2013.

How to set Air pressure, Utube screenshot printed Oct. 9, 2013.

Dhio EPA Letty to Tony Larimer, response to letter dated Aug. 2006.

Pinahs Ben-Tzvi et al, A conceptual design . . . , Mechatronics 17 (2007) p. 1-13.

On line ad from Amazon.com printed Oct. 14, 2013.

Rone et al, MEMS-Baed Microdroplet Generation with Integrated Sensing, COMSOL, 2011.

International Search Report (dated Jun. 20, 2008), Written Opinion (dated Jun. 20, 2008), and International Preliminary Report on Patentability (dated Sep. 14, 2010) from PCT/US2008/03318 filed Mar. 12, 2008.

Response filed Dec. 7, 2015 to Office Action dated Aug. 7, 2015 for U.S. Appl. No. 13/991,285.

(56)

References Cited

OTHER PUBLICATIONS

Response filed Dec. 21, 2015 to Office Action dated Jul. 20, 2015 for U.S. Appl. No. 14/113,649.
Office Action dated Dec. 31, 2015 for U.S. Appl. No. 14/572,998.
Notice of Allowance dated Jan. 19, 2016 for Design U.S. Appl. No. 29/539,615.
Notice of Allowance dated Jan. 22, 2016 for U.S. Appl. No. 13/991,285.
Notice of Allowance dated Jan. 27, 2016 for Design U.S. Appl. No. 29/510,723.
Response to Office Action filed Feb. 16, 2016 for U.S. Appl. No. 13/698,417.
Screen shot of a SATA product (SATAjet B) description retrieved on Feb. 12, 2016 from www.sata.com/index.php.
"The Hot Rolling Process;" California Steel; retrieved on Feb. 12, 2016 from <http://www.californiasteel.com/GetPublicFile.aspx?id=53>.
Office Action dated Feb. 19, 2016 for U.S. Appl. No. 14/113,649.
Final Office Action dated Feb. 25, 2016 for U.S. Appl. No. 13/698,417.
Response filed Mar. 31, 2016 to Office Action dated Dec. 31, 2016 for U.S. Appl. No. 14/572,998.
Notice of Allowance dated Apr. 18, 2016 for U.S. Appl. No. 14/572,998.
Response filed Apr. 27, 2016 to Office Action dated Jan. 29, 2016 for U.S. Appl. No. 13/380,949.
German Search Report dated Apr. 12, 2016 for related German Application No. 10 2015 008 735.5.

Second Chinese Office Action dated Jun. 24, 2015 for Chinese Application No. 2011800266029 (related to 17).
Third Chinese Office Action dated Nov. 30, 2015 for Chinese Application No. 2011800266029 (related to 17).
Final Office Action dated Aug. 29, 2016 for U.S. Appl. No. 14/113,649 (36).
Response to Final Office Action and RCE dated Nov. 29, 2016 in U.S. Appl. No. 14/113,649.
Office Action from U.S. Appl. No. 15/143,698 dated Jan. 5, 2017.
German Search Report for German Application No. 10 2015 016 474.0 dated Aug. 9, 2016, 14 pages.
Notice of Allowance in U.S. Appl. No. 29/556,463, filed Mar. 1, 2016, 9 pages.
Notice of Allowance in U.S. Appl. No. 29/555,656, filed Feb. 24, 2016, 5 pages.
Notification of the First Office Action with search report dated Aug. 24, 2015 for Chinese Application No. 201280020519.5 (related to U.S. Appl. No. 14/113,649), 13 pages.
Notification of the Second Office Action dated May 16, 2016, for Chinese Application No. 201280020519.5 (related to U.S. Appl. No. 14/113,649), 5 pages.
Japanese Office Action for JP2014-517485 (related to U.S. Appl. No. 14/113,649), dated Jul. 5, 2016, 16 pages.
International Preliminary Report on Patentability for PCT/EP2015/001728 filed Aug. 25, 2015.
Final Office Action dated Mar. 16, 2017 from U.S. Appl. No. 13/698,417, 9 pages.

* cited by examiner

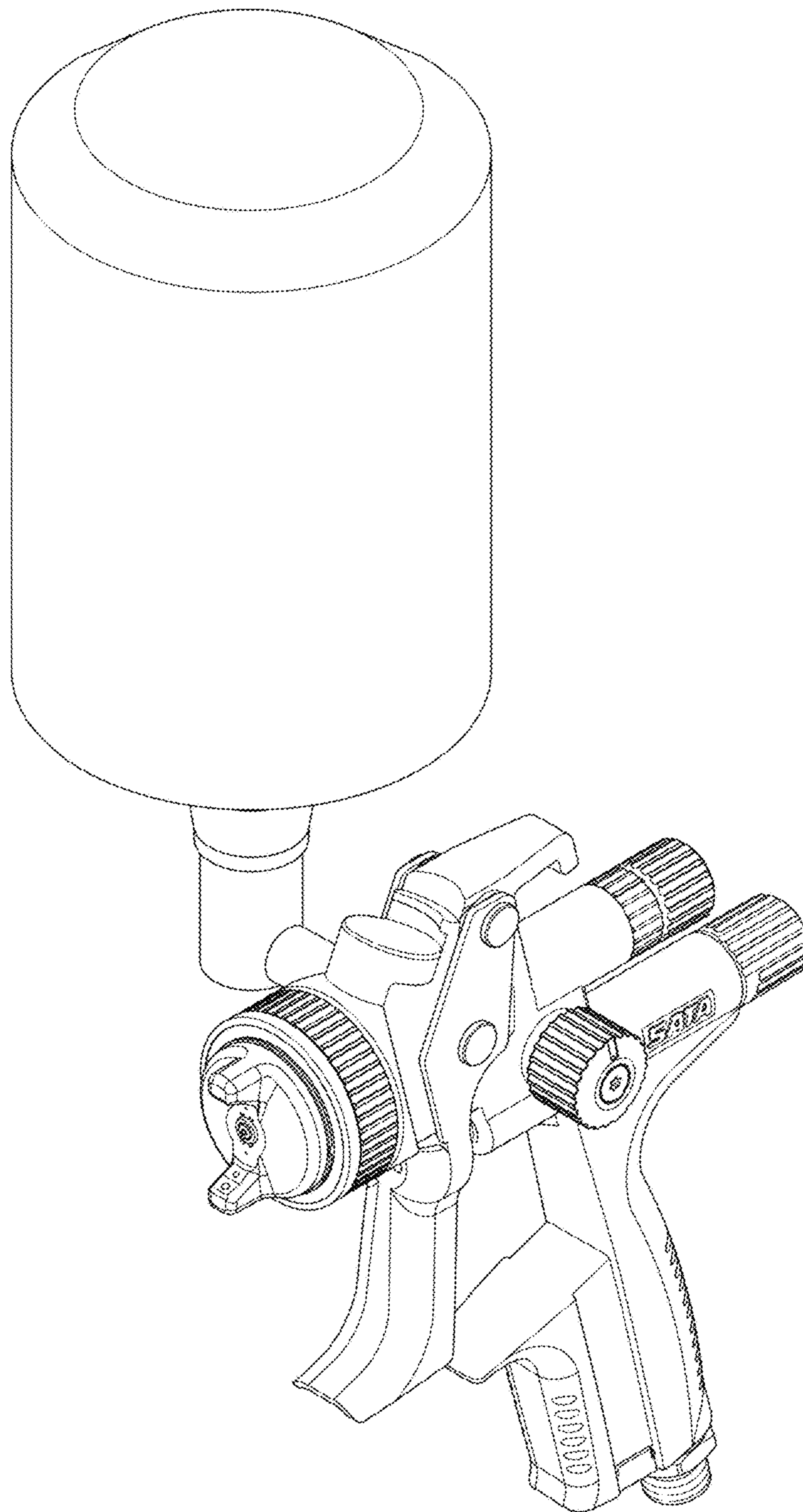


FIG. 1

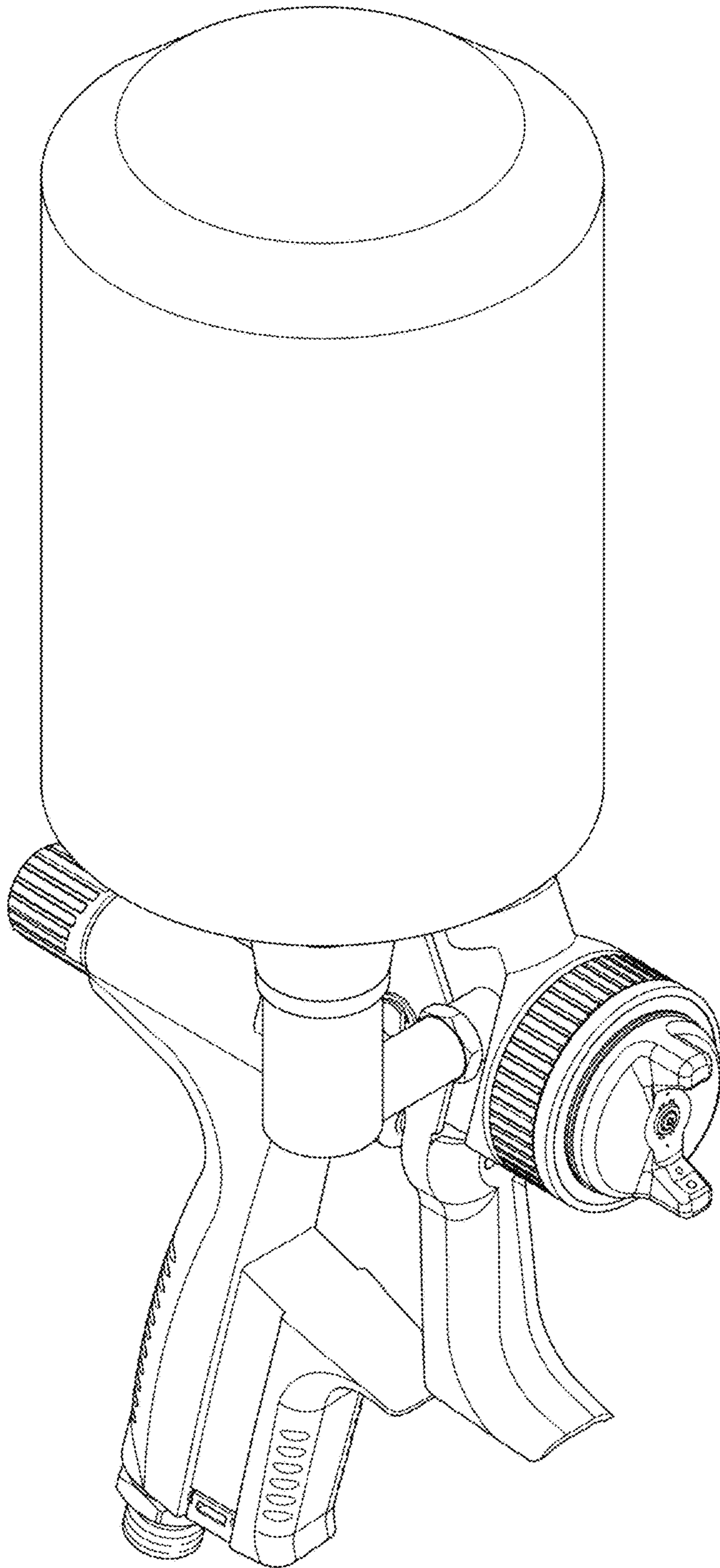


FIG. 2

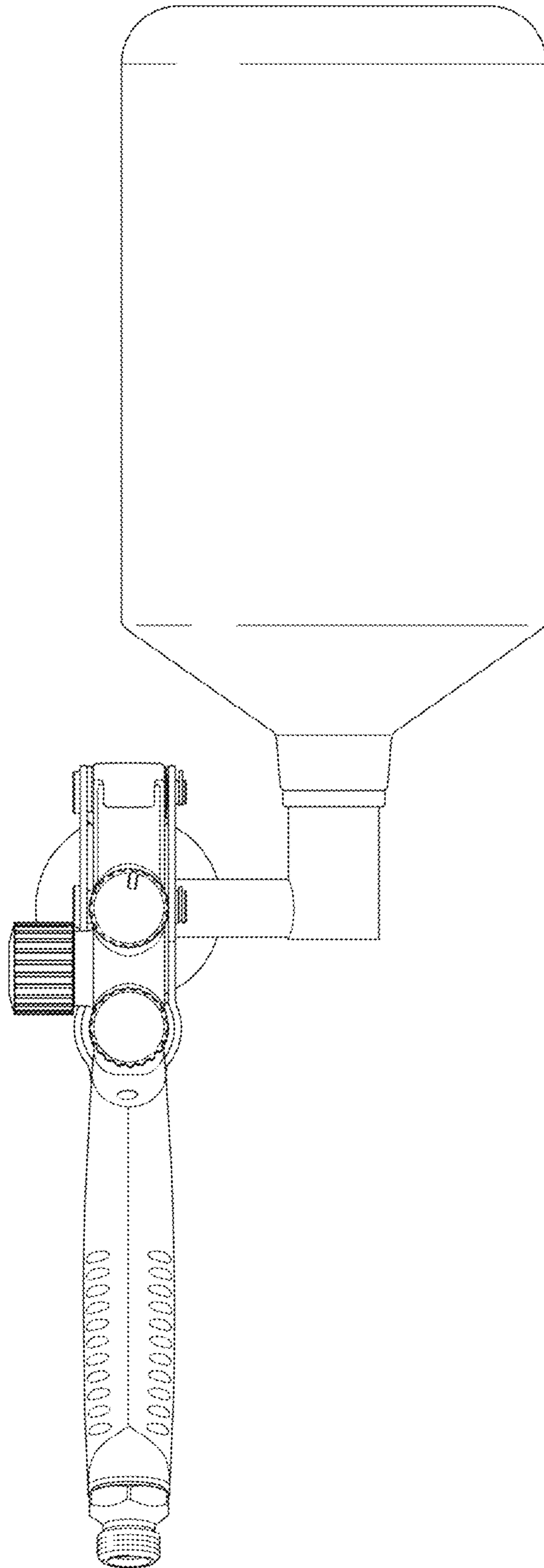


FIG. 3

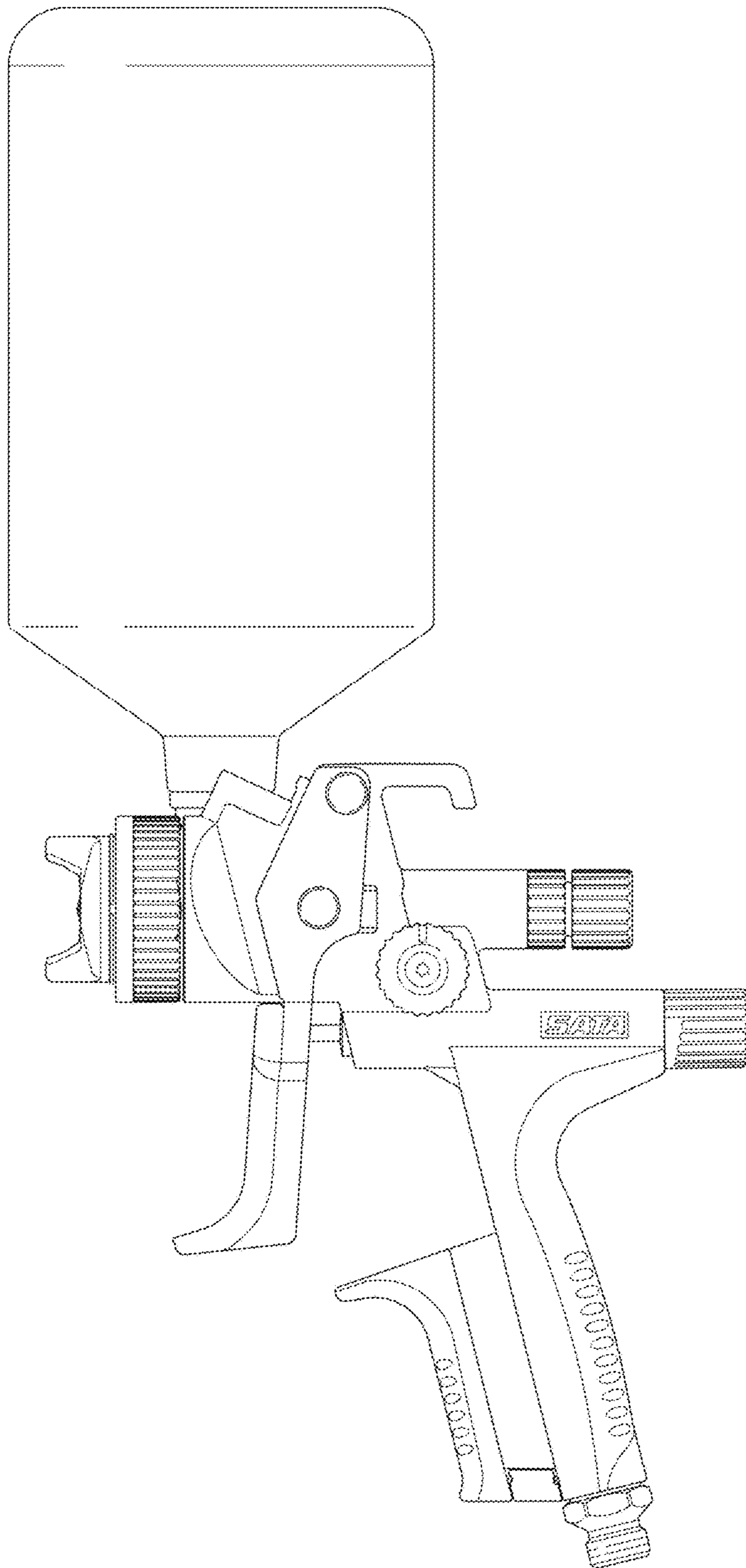


FIG. 4

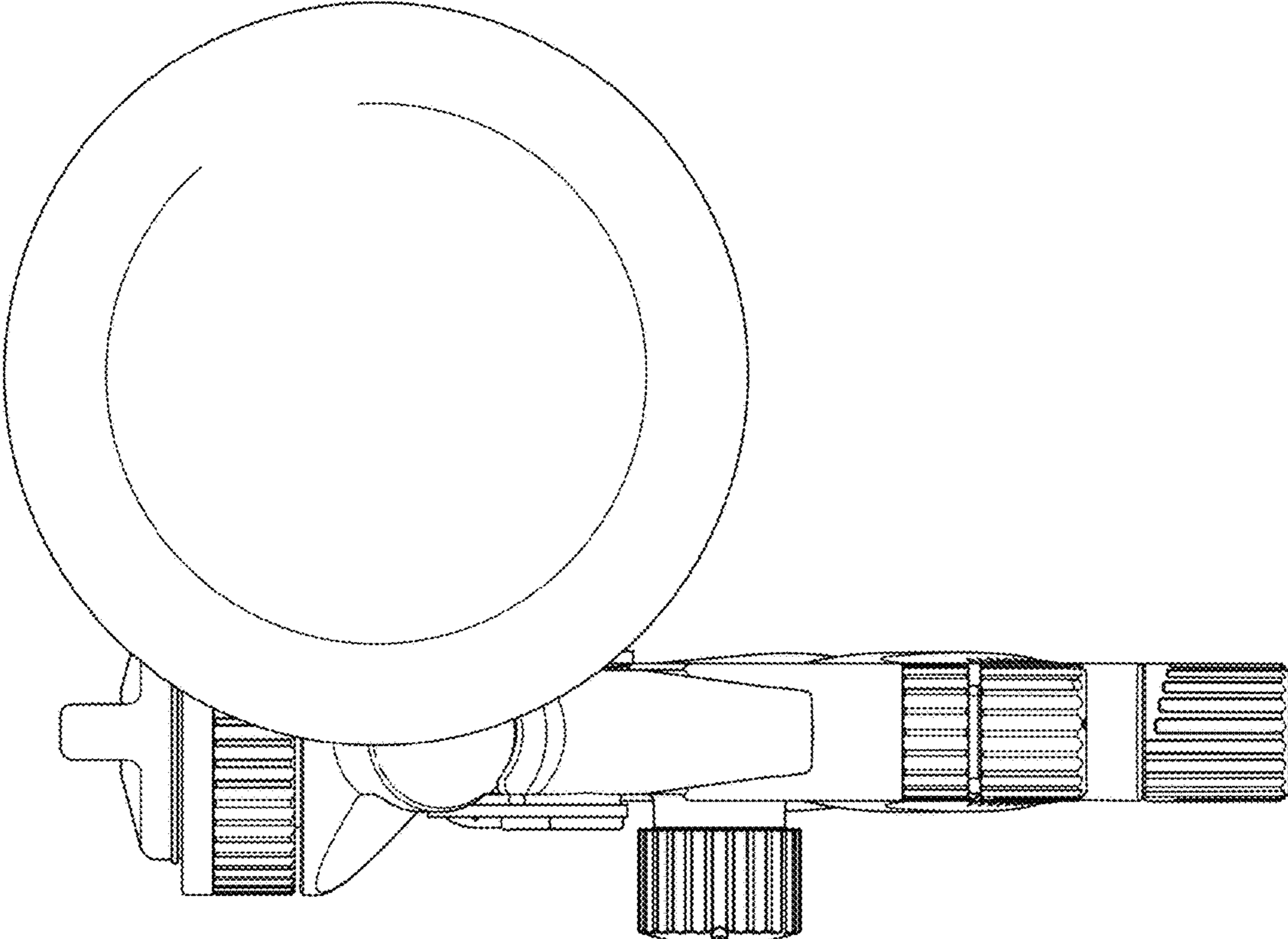


FIG. 5

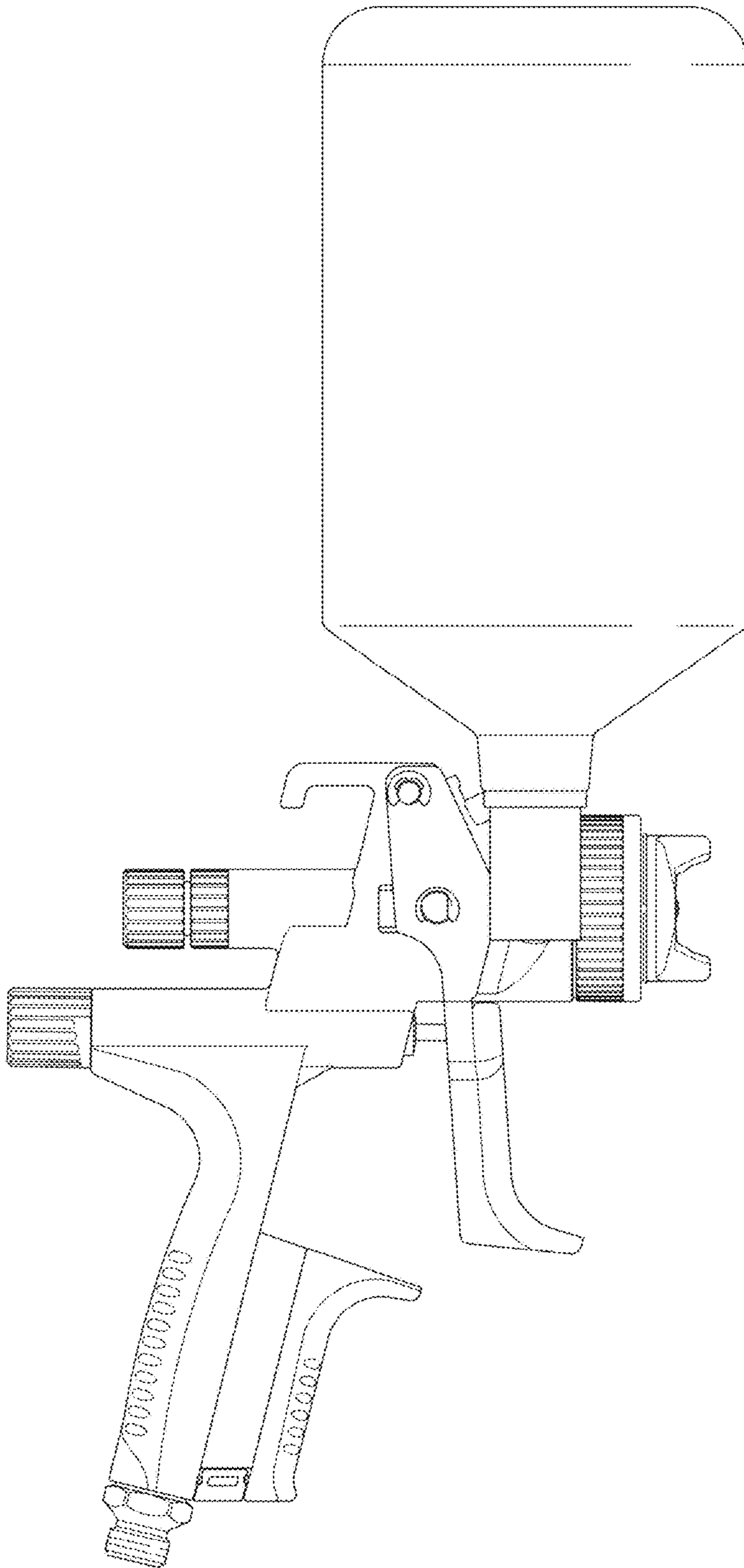


FIG. 6

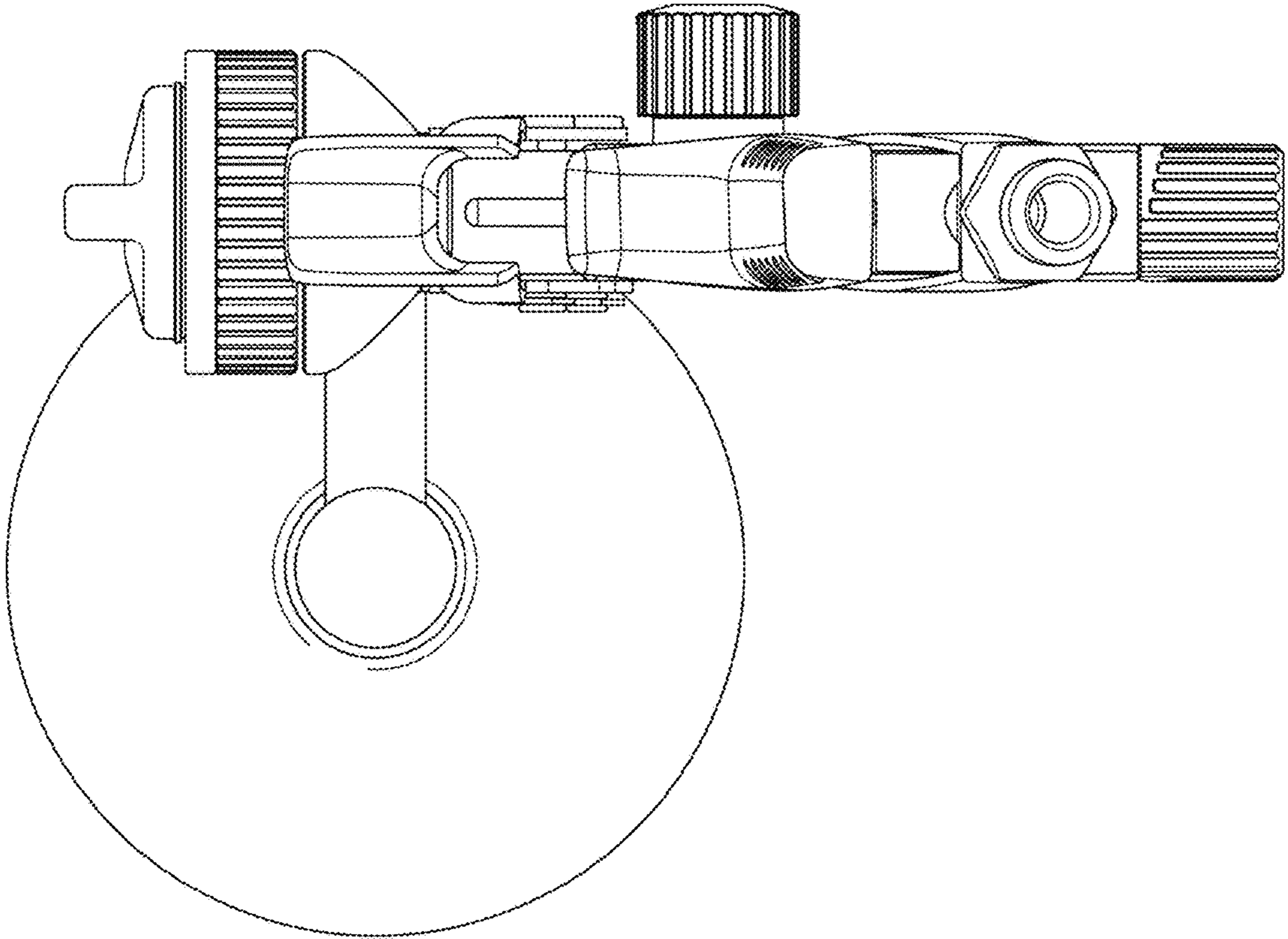


FIG. 7

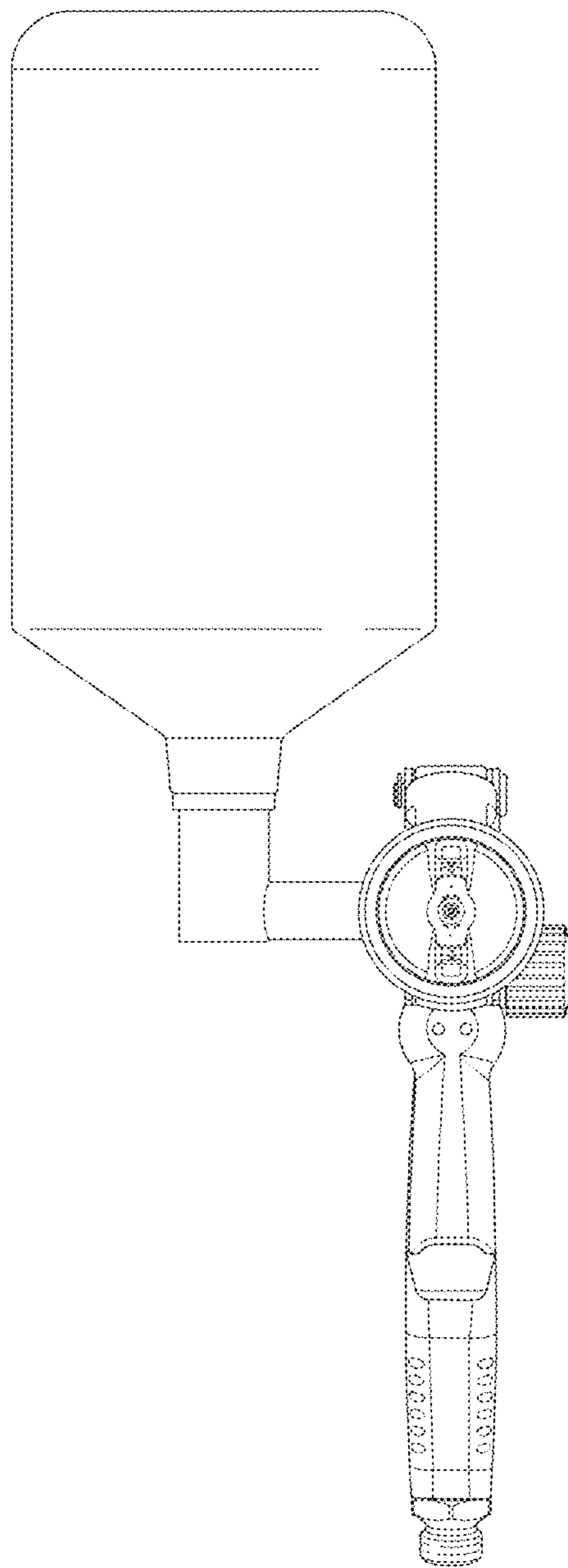


FIG. 8