



- (51) International Patent Classification:
B05B 12/02 (2006.01) *F04B 49/08* (2006.01)
B05B 1/02 (2006.01)
- (21) International Application Number:
PCT/US2012/021449
- (22) International Filing Date:
16 January 2012 (16.01.2012)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
61/432,652 14 January 2011 (14.01.2011) US
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- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK,

[Continued on next page]

(54) Title: CONTROL VALVE FOR AIRLESS SPRAYER PRESSURE ADJUSTMENT

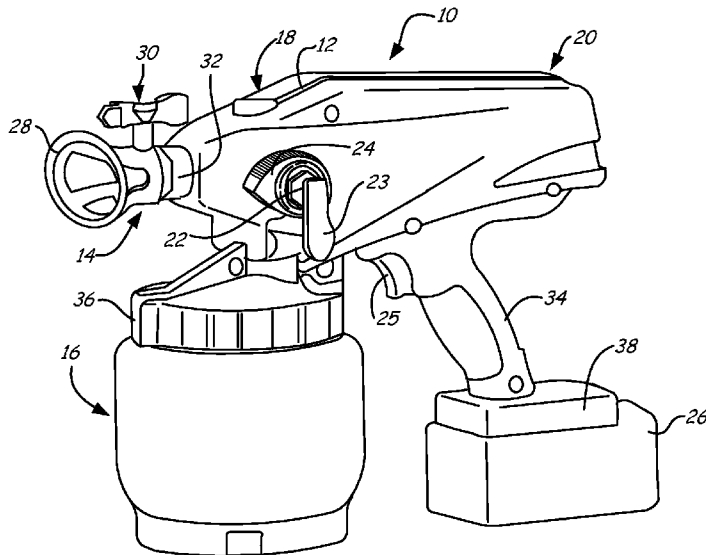


FIG. 2

(57) Abstract: A control valve for a fluid dispensing device comprises a valve stem, a valve body, a cap and an adjustment mechanism. The elongate valve stem has a flange. The valve body comprises a valve bore in which the elongate valve stem is configured to translate, and a flow path intersecting the valve bore and into which the valve stem penetrates. The cap is joined to the valve body to receive the valve stem such that the flange is positioned between the valve body and the cap. The adjustment mechanism changes a position of the cap with respect to the valve body to vary a distance between the cap and the flange which adjusts the force, and thereby the pressure at which the valve opens.





SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

— before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments (Rule 48.2(h))

Declarations under Rule 4.17:

— of inventorship (Rule 4.17(iv))

(88) Date of publication of the international search report:

8 November 2012

Published:

— with international search report (Art. 21(3))

A. CLASSIFICATION OF SUBJECT MATTER***B05B 12/02(2006.01)i, B05B 1/02(2006.01)i, F04B 49/08(2006.01)i***

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

B05B 12/02; B05B 9/08; B05B 9/01; B05B 1/32; B05B 9/04

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: control valve,airless sprayer,pressure adjustment,bore,cap,cup,housing,flange,pump,spary tip,drive element,motor,plunger,sleeve,wall,orifice,spring,stem

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 2010-047800 A2 (GRACO MINNESOTA INC. et al.) 29 April 2010	1-2,5-6
A	See page 7,lines 22-23,page 13,lines 25-33,page 14,lines 10-12,page 17,lines 8-10,page 21,line 23 - page 22,line 14 ,claim 1,and figures 4,10,13,23	3-4,7-19
Y	US 05609300 A (CONATSER; ROGER) 11 March 1997	1-2,5-6
A	See column 5,lines 1-40,claims 1,10, and figures 1-3	3-4,7-19
A	US 05699967 A (CONATSER; ROGER et al.) 23 December 1997	1-19
	See column 4,lines 1-3,20-23,column 5,lines 32-44,49-52,column 6,lines 10-14, 41-45,claims 1,5,and figures 1-3	

 Further documents are listed in the continuation of Box C. See patent family annex.

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"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents,such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

29 AUGUST 2012 (29.08.2012)

Date of mailing of the international search report

31 AUGUST 2012 (31.08.2012)

Name and mailing address of the ISA/KR

Korean Intellectual Property Office
189 Cheongsu-ro, Seo-gu, Daejeon Metropolitan
City, 302-701, Republic of Korea

Facsimile No. 82-42-472-7140

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2012/021449

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