

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

Declarations under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

Published:

- *with international search report (Art. 21(3))*
- *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))*

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

02 November 2017 (02.11.2017)

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2017/025309

A. CLASSIFICATION OF SUBJECT MATTER
INV. B05C11/10
ADD.

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)

B05C B05B B05D F04C

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

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

EP0-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 2 404 679 A1 (HENKEL AG & CO KGAA [DE]) 11 January 2012 (2012-01-11)	1-6,9-14
Y	abstract; figures 1-2 paragraph [0033] paragraph [0001] paragraph [0038] paragraph [0043] - paragraph [0044] -----	7,8, 15-19
Y	US 2014/014686 A1 (BACCO DAVID ROBERT [US] ET AL) 16 January 2014 (2014-01-16) abstract; figure 2 paragraph [0025] -----	7,8
Y	WO 2011/084727 A2 (HENKEL CORP; RZONCA GARY; JOHNSON ERIN) 14 July 2011 (2011-07-14) abstract; figures 1-4 paragraph [0020] ----- -/--	15-19



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"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

25 September 2017

Date of mailing of the international search report

04/10/2017

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040,
Fax: (+31-70) 340-3016

Authorized officer

Ciotta, Fausto

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2017/025309

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	Nordson: "TruFlow Meter", 6 June 2013 (2013-06-06), XP055381300, Retrieved from the Internet: URL:http://www.nordson.com/-/media/Files/Nordson/adhesive-dispensing-systems/Products/Remote-Metering-Systems/TruFlow-Meter.pdf?la=en [retrieved on 2017-06-13] the whole document	7,8,20
A	EP 1 591 170 A2 (NORDSON CORP [US]) 2 November 2005 (2005-11-02) abstract; figures 1-6	1-19
A	US 2001/047754 A1 (FALCK MICHAEL E [US] ET AL) 6 December 2001 (2001-12-06) abstract	1-19
X	WO 2016/007639 A1 (ILLINOIS TOOL WORKS [US]) 14 January 2016 (2016-01-14) abstract; figures 2,3,4 page 21, line 10 - line 20 page 3, line 28 - line 32	20,21, 27-29 1-19
A	WO 2016/010597 A1 (GRACO MINNESOTA INC [US]) 21 January 2016 (2016-01-21) abstract; figure 2	1-19
X	Nordson Adhesive Systems: "Nordson TruFlow Meter Concert Controller Variation Management", 23 October 2013 (2013-10-23), page 1, XP054977433, Retrieved from the Internet: URL:https://www.youtube.com/watch?v=l3vt4jdCsR8&list=PL7374C5CC3B985C05&index=10 [retrieved on 2017-06-15] the whole document	20-31
A	EP 2 587 063 A2 (NORDSON CORP [US]) 1 May 2013 (2013-05-01) abstract; figure 3	20-31

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2017/025309

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of Item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
3. ☒ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

1-31
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☒ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2017/025309

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 2404679	A1	11-01-2012	BR 112013000265 A2	24-05-2016
			CA 2803237 A1	12-01-2012
			CN 102971086 A	13-03-2013
			EP 2404679 A1	11-01-2012
			EP 2590755 A1	15-05-2013
			JP 2013538672 A	17-10-2013
			KR 20130091309 A	16-08-2013
			US 2013123975 A1	16-05-2013
			WO 2012004327 A1	12-01-2012

US 2014014686	A1	16-01-2014	BR 102013018054 A2	20-10-2015
			CN 103537408 A	29-01-2014
			EP 2684615 A1	15-01-2014
			JP 2014018798 A	03-02-2014
			MX 345468 B	01-02-2017
			US 2014014686 A1	16-01-2014

WO 2011084727	A2	14-07-2011	US 2012259448 A1	11-10-2012
			WO 2011084727 A2	14-07-2011

EP 1591170	A2	02-11-2005	EP 1591170 A2	02-11-2005
			JP 2005313171 A	10-11-2005
			US 2005241576 A1	03-11-2005
			US 2009038707 A1	12-02-2009

US 2001047754	A1	06-12-2001	NONE	

WO 2016007639	A1	14-01-2016	EP 2965823 A1	13-01-2016
			ES 2622515 T3	06-07-2017
			PL 2965823 T3	31-07-2017
			US 2017083029 A1	23-03-2017
			WO 2016007639 A1	14-01-2016

WO 2016010597	A1	21-01-2016	CN 106662098 A	10-05-2017
			EP 3169901 A1	24-05-2017
			US 2016008834 A1	14-01-2016
			WO 2016010597 A1	21-01-2016

EP 2587063	A2	01-05-2013	CN 103089613 A	08-05-2013
			EP 2587063 A2	01-05-2013
			JP 2013096415 A	20-05-2013
			US 2013108494 A1	02-05-2013

INTERNATIONAL SEARCH REPORT

International Application No. PCT/ US2017/ 025309

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-19

An adhesive tracking system

2. claims: 20-31

A flow meter

3. claims: 32-38

A hot melt adhesive system
