

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
8 February 2007 (08.02.2007)

PCT

(10) International Publication Number
WO 2007/014956 A3

(51) International Patent Classification:
B65G 1/137 (2006.01)

(21) International Application Number:
PCT/EP2006/064923

(22) International Filing Date: 1 August 2006 (01.08.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
BO2005A000521 3 August 2005 (03.08.2005) IT

(71) Applicant (for all designated States except US): U.T.I.T.
S.P.A. [IT/IT]; Via Perosi 183, I-41100 Modena (IT).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **OGNIBENE, Franco** [IT/IT]; Via Monchio 122, I-41100 Modena (IT).
ALBORESI, Luigi [IT/IT]; Via Portogruaro 4, I-41100 Modena (IT).

(74) Agent: **DALL'OLIO, Giancarlo**; Invention S.r.l., Via delle Armi 1, I-40137 Bologna (IT).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

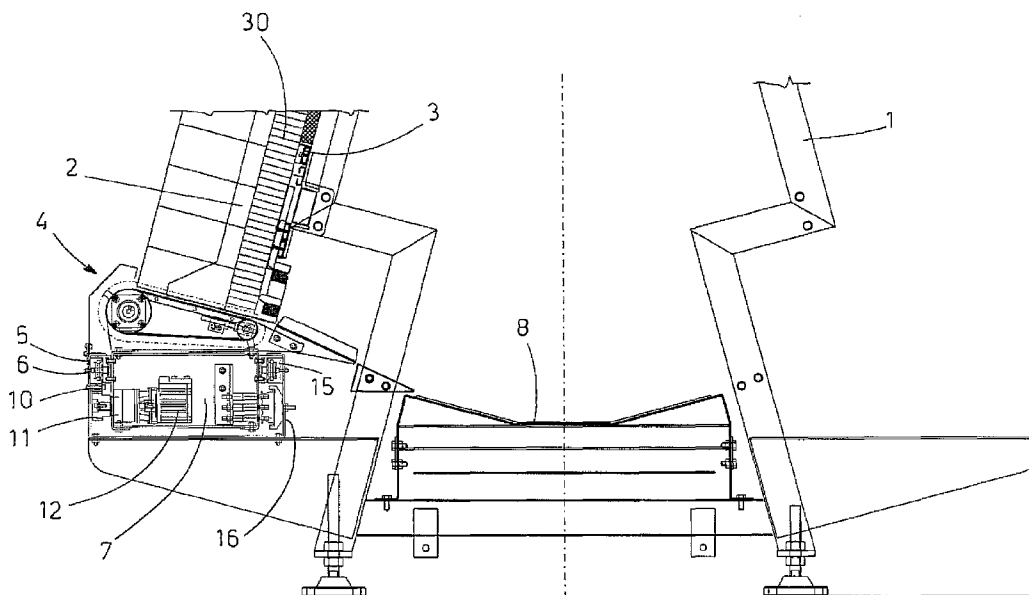
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— with international search report

(88) Date of publication of the international search report:
7 June 2007

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: A COMMISSIONER MACHINE FOR AUTOMATIC PROCESSING OF ORDERS



(57) Abstract: A machine for automated processing of orders with products (30) piled up in storage units (2), arranged in rows, includes the use of motorized carriages (7), moving autonomously and coordinated one with another, and having ejector means (4). The carriages are moved in a coordinated way, until they are placed below the storage units containing selected products, by a control unit (20), which cooperates with a central control unit (50). Then, the ejector means are operated to pick up, from the storage units, the products forming the order prepared each time.

WO 2007/014956 A3

INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2006/064923

A. CLASSIFICATION OF SUBJECT MATTER INV. B65G1/137		
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) B65G		
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 practical, search terms used) EPO-Internal		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	FR 2 419 243 A1 (SIDETEL [FR]) 5 October 1979 (1979-10-05) page 2, line 15 - page 3, line 12 page 4, line 12 - line 34 figures 1-4	1-3,8, 15,17
Y	-----	4,5,10, 18,21,22
Y	WO 2005/009691 A (FANUC ROBOTICS AMERICA INC [US]; JHAVERI NISHANT [US]; MISRA RANGANATH) 3 February 2005 (2005-02-03) page 4, line 29 - page 5, line 3; figures 1,2 ----- -/--	4,5
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> 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 document 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 28 February 2007		Date of mailing of the international search report 22/03/2007
Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016		Authorized officer Sundqvist, Stefan

INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2006/064923

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2003/034356 A1 (FREUDELSPERGER KARL [AT]) 20 February 2003 (2003-02-20) paragraphs [0008], [0025], [0026], [0071], [0073] - [0075] -----	10,12, 15,18, 21,22
Y	FR 2 696 722 A (MDE [FR]) 15 April 1994 (1994-04-15) page 10, line 27 - line 34; figure 2 -----	10,12, 15,18, 21,22

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP2006/064923

Box 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 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 fee, this Authority did not invite payment of any additional fee.

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.:
1-5, 8, 10, 12, 15, 17, 18, 21, 22

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.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

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

1. claims: 1-5, 8, 15, 17

The machine with brushless motor.

2. claims: 6 (as dependent on claim 1), 7

The machine with slide contacts.

3. claim: 9 (as dependent on claims 1 and 8)

The machine with support for guide.

4. claims: 10, 12 (as dependent on claim 1), 15 (one version), 18
(as dependent on claim 15), 21, 22

The machine, method and system, respectively, with
coordinated carriages.

5. claims: 11 (as dependent on claim 1), 16 (as dependent on claim
15)

The machine and method, respectively, with central radio
control.

6. claims: 13, 14 (as dependent on claim 1)

The machine with video camera.

7. claims: 19 (as dependent on claim 15), 20

The method where the storage units define a tunnel.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/EP2006/064923

Patent document cited in search report	Publication date	Publication date	Patent family member(s)	Publication date
FR 2419243	A1	05-10-1979	DE 2908027 A1	20-09-1979
WO 2005009691	A	03-02-2005	CN 1839018 A	27-09-2006
			EP 1648664 A1	26-04-2006
			JP 2006528082 T	14-12-2006
US 2003034356	A1	20-02-2003	AT 272013 T	15-08-2004
			AU 4834901 A	03-10-2001
			DE 10012942 A1	04-10-2001
			WO 0170602 A2	27-09-2001
			EP 1268318 A2	02-01-2003
			ES 2225514 T3	16-03-2005
FR 2696722	A	15-04-1994	NONE	