



Europäisches Patentamt  
European Patent Office  
Office européen des brevets



(11)

**EP 1 083 125 A3**

(12)

## EUROPEAN PATENT APPLICATION

(88) Date of publication A3:  
**17.03.2004 Bulletin 2004/12**

(51) Int Cl.7: **B65B 1/26**, B30B 15/30,  
B30B 11/00

(43) Date of publication A2:  
**14.03.2001 Bulletin 2001/11**

(21) Application number: **00119314.3**

(22) Date of filing: **06.09.2000**

(84) Designated Contracting States:  
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU  
MC NL PT SE**  
Designated Extension States:  
**AL LT LV MK RO SI**

(72) Inventors:  
• **Sagawa, Masato**  
**Kyoto 606-8294 (JP)**  
• **Nagata, Hiroshi**  
**Ushigase, Nishikyo-ku, Kyoto 615-8031 (JP)**

(30) Priority: **07.09.1999 JP 25276699**

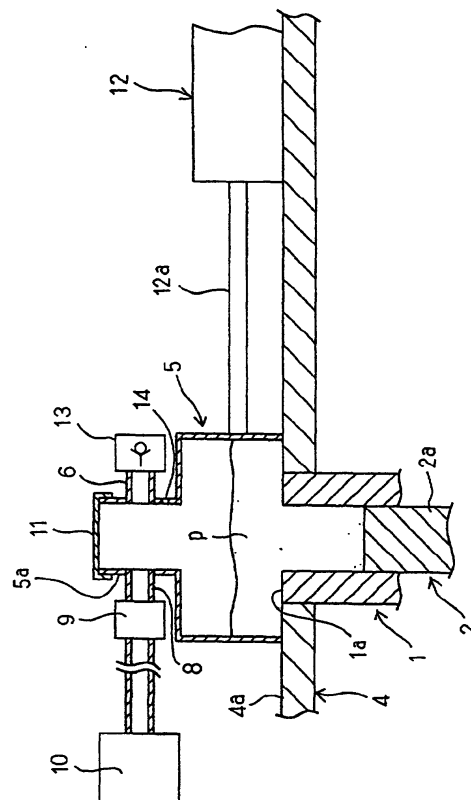
(74) Representative: **HOFFMANN - EITLE**  
**Patent- und Rechtsanwälte**  
**Arabellastrasse 4**  
**81925 München (DE)**

(71) Applicant: **Intermetallics Co., Ltd.**  
**Kyoto 615-8206 (JP)**

### (54) Method and apparatus for packing material

(57) The present invention relates to a packing method and an apparatus implementing said method in which a material is packed into a container by an air tapping process in which the air-pressure state of the space comprising a container and a space part connected with said container, which space being loaded with the material, is switched several times from a low air-pressure state to a high air-pressure state alternately, while keeping said low air-pressure state equal to or higher than the atmospheric pressure existing outside said space, thereby preventing the material from getting blown up by the inflow of the atmospheric air outside the container and packing a material into said container homogeneously.

**【Figs.1】**



**EP 1 083 125 A3**



European Patent  
Office

# EUROPEAN SEARCH REPORT

Application Number  
EP 00 11 9314

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	US 5 897 826 A (BEANE GLENN L ET AL) 27 April 1999 (1999-04-27) * column 7, line 27 - column 10, line 51; figures 1-5 *	1-5	B65B1/26 B30B15/30 B30B11/00
	---		
P,X	EP 0 988 959 A (INTERMETALLICS CO LTD) 29 March 2000 (2000-03-29) * column 7, line 15 - column 8, line 6; figures 4,5 *	1-5	
	---		
X	US 5 727 607 A (NARUSHIMA MICHIHARU ET AL) 17 March 1998 (1998-03-17) * column 4, line 56 - column 5, line 2; figures 2-4 *	1-5	
	---		
A	DE 10 16 538 B (DEUTSCHE EDELSTAHLWERKE AG) 26 September 1957 (1957-09-26) * column 3, line 20 - column 4, line 27; figure 1 *	1-5	
	---		
A	FR 2 094 352 A (COMMISSARIAT ENERGIE ATOMIQUE) 4 February 1972 (1972-02-04) * page 2, line 30 - page 4, line 16; figure 1 *	1-5	TECHNICAL FIELDS SEARCHED (Int.Cl.7) B65B B30B
	-----		
The present search report has been drawn up for all claims			
Place of search MUNICH		Date of completion of the search 16 January 2004	Examiner Johne, O
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

EPO FORM 1503 03.82 (P04001)

**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 00 11 9314

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
The members are as contained in the European Patent Office EDP file on  
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

16-01-2004

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5897826	A	27-04-1999	US 5885625 A	23-03-1999
			AU 739887 B2	25-10-2001
			AU 6017998 A	08-09-1998
			CN 1247497 T	15-03-2000
			EP 1007312 A1	14-06-2000
			JP 2001521578 T	06-11-2001
			WO 9835806 A1	20-08-1998
			US 6241935 B1	05-06-2001
			AU 725422 B2	12-10-2000
			AU 3371097 A	07-01-1998
			CA 2257830 A1	18-12-1997
			EP 0991512 A1	12-04-2000
			JP 2001522402 T	13-11-2001
			KR 2000016643 A	25-03-2000
			WO 9747445 A1	18-12-1997
			US 5945135 A	31-08-1999
EP 0988959	A	29-03-2000	JP 2000096104 A	04-04-2000
			EP 0988959 A2	29-03-2000
			US 2002098106 A1	25-07-2002
			US 2002122737 A1	05-09-2002
			US 6475430 B1	05-11-2002
US 5727607	A	17-03-1998	JP 8198202 A	06-08-1996
DE 1016538	B	26-09-1957	NONE	
FR 2094352	A	04-02-1972	FR 2094352 A5	04-02-1972
			BE 768566 A1	03-11-1971

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82