



Europäisches Patentamt
European Patent Office
Office européen des brevets



(11) **EP 0 720 898 A3**

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
14.01.1998 Bulletin 1998/03

(51) Int Cl.⁶: **B29B 17/02, B29C 47/38,**
B29C 47/80, B03B 9/06
// B29K105:26

(43) Date of publication A2:
10.07.1996 Bulletin 1996/28

(21) Application number: **95120345.4**

(22) Date of filing: **21.12.1995**

(84) Designated Contracting States:
CH DE ES FR GB LI NL SE

(72) Inventors:
• **Panontin, Mario**
I-31040 Meduna di Livenza (TV) (IT)
• **Bertoglio, Mario**
I-44100 Ferrara (IT)

(30) Priority: **23.12.1994 IT PN940079**

(74) Representative: **Dalla Rosa, Adriano**
Via S. Vito 13/B
33170 Pordenone (IT)

(71) Applicant: **Techline Services and Engineering**
S.A.
6900 Lugano (CH)

(54) **Improvement in the recycling method for the re-use of solid household and similar wastes**

(57) Method for re-compacting and moulding solid plasticized substances using heterogeneous materials, in particular solid household and similar waste, wherein said waste is previously cleaned to remove earthy substances, organic substances and metals, comprising a process step in which said cleaned waste compound is finely shredded, an addition of blending and alloying additives into said shredded compound, and the extrusion of the so prepared compound into appropriate dies, in which said solid substances are eventually moulded un-

der pressure, wherein said extrusion is performed at a temperature that increases progressively until a steady-state temperature is reached which corresponds to the highest attainable process temperature. Ideally, such highest attainable process temperature does not exceed 180°C.

The extrusion screw has a main pushing shoulder showing a curvilinear profile, and between a main pushing shoulder and the next one a secondary pushing shoulder is provided whose profile is lower than that of the main pushing shoulder.

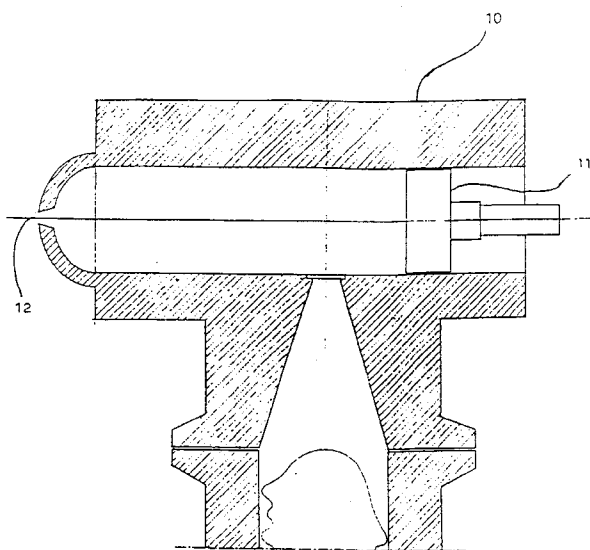


FIG. 6

EP 0 720 898 A3



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 95 12 0345

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.6)
X	DE 28 37 621 A (HAEBERLE WILHELM) 10 April 1980 * page 13, paragraph 2 * * page 15; figures 1-3 *	1-13	B29B17/02 B29C47/38 B29C47/80 B03B9/06 //B29K105:26
X	US 5 217 655 A (SCHMIDT ERICK) 8 June 1993 * column 1, line 6 - line 25 * * column 3, line 46 - line 65; figure 1 * * claims 1,18,23; example *	1,2,8	
X	EP 0 619 169 A (TONEN SEKIYUKAGAKU KK ;TOYOTA MOTOR CO LTD (JP)) * page 3, line 55 - page 4, line 17 * * page 7, line 35 - line 50 * * page 9, line 48 - line 51 * * page 10, line 51 - line 56; figure 2 * * examples; tables *	1,10	
A	EP 0 140 846 A (FORNASERO RENATO) * page 3, line 13 - line 22 * * page 7, line 17 - page 11, line 3 * * page 13, line 26 - page 15, line 11; figure 1 *	1	
A	US 5 217 800 A (PENTECOST MARK A J) * column 15, line 62 - column 16, line 3 * * column 14, line 17 - line 35 * * column 10, line 41 - line 65 * * column 9, line 40 - line 60 * * column 2, line 13 - line 40 *	1,11	
A	US 5 141 326 A (ESHIMA MITSUAKI) * column 3, line 22 - line 49; figures 1A-1C *	4,7,8	
A	FR 1 351 109 A (W. MÜLLER) 4 May 1964 * claim 1; figures *	1,7-9	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			B29B B09B B29C
Place of search	Date of completion of the search	Examiner	
MUNICH	24 October 1997	Topalidis, A	
CATEGORY OF CITED DOCUMENTS		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	
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		& : member of the same patent family, corresponding document	

EPO FORM 1503 03.82 (PM03.1)