



(12)

**EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:  
**23.03.2005 Bulletin 2005/12**

(51) Int Cl.<sup>7</sup>: **B27N 1/02**

(43) Date of publication A2:  
**20.10.2004 Bulletin 2004/43**

(21) Application number: **04075834.4**

(22) Date of filing: 15.03.2004

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

(72) Inventor: **Benedetti, Paolo**  
**41100 Modena (IT)**

(74) Representative: **Gotra, Stefano**  
**BUGNION S.p.A.**  
**Via Emilia Est 25**  
**41100 Modena (IT)**

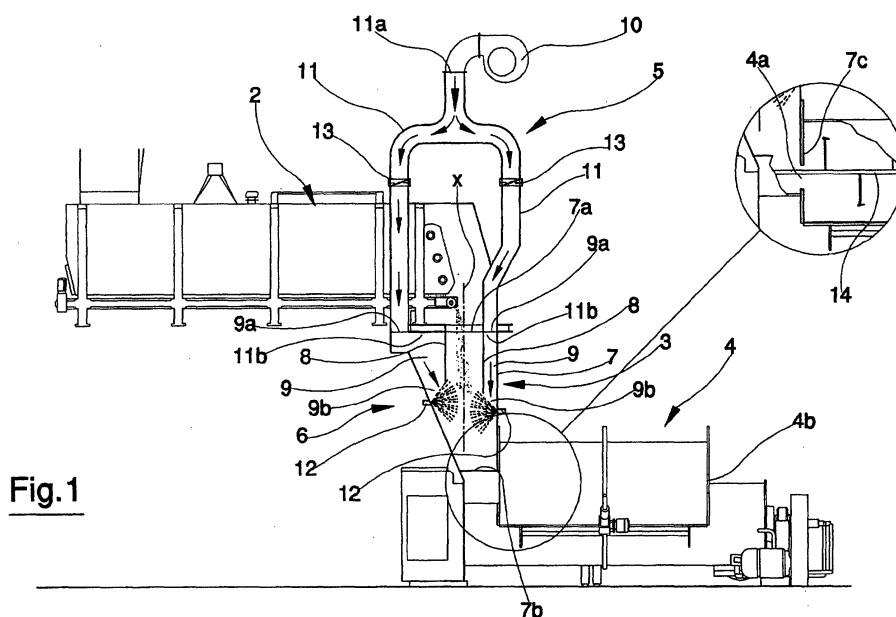
(30) Priority: 15.04.2003 IT mo20030104

(71) Applicant: **Imal S.R.L.**  
**41010 San Damaso, Modena (IT)**

(54) **Process and apparatus for adding glue to a flow of loose wood materials**

(57) The plant comprises a device (2) for feeding a mass of loose wood material, consisting of particles, to a loading conduit (3) of a mixer (4) provided with an inlet (4a) for the mass of wood material and an outlet (4b), and also comprises means (5) for sending a flow of air into the loading conduit (3) and means for injecting (6) glue into the mass of wood material upstream of an entry of the wood material into the mixer (4). The process comprises: feeding a mass of loose wood material in

particle form from a device (2) to a loading hopper (7) of a mixer (4); sending a flow of hot air into the hopper (7); atomising and injecting glue into the mass of loose wood material upstream of an inlet of the wood material into the mixer (4) by means of at least one injector (12) associated to a lateral surface of the hopper (7); sending the mass of wood material when mixed with the glue internally of the mixer (4); sending the mass of wood material mixed with the glue onto subsequent work stations.



**Fig. 1**



European Patent  
Office

# EUROPEAN SEARCH REPORT

Application Number  
EP 04 07 5834

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.CI.7)
X	EP 1 022 103 A2 (C.M.P. COSTRUZIONI MECCANICHE POMPONESCO S.P.A) 26 July 2000 (2000-07-26) * paragraph '0010! - paragraph '0011! *	1	B27N1/02
A	DE 41 15 047 C1 (DRAISWERKE GMBH, 6800 MANNHEIM, DE) 16 July 1992 (1992-07-16) * abstract * * column 4, line 7 - line 22; figure 1 *	1-9	
A	US 4 323 314 A (KAISER-WIRZ ET AL) 6 April 1982 (1982-04-06)		
A	WO 02/066214 A1 (IMAL S.R.L; BENEDETTI, PAOLO) 29 August 2002 (2002-08-29)		
			TECHNICAL FIELDS SEARCHED (Int.CI.7)
			B27N
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 28 January 2005	Examiner J-E. Söderberg
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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 &amp; : member of the same patent family, corresponding document</p>			

1  
EPO FORM 1503 03/82 (P04C01)

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

EP 04 07 5834

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.

28-01-2005

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
EP 1022103	A2	26-07-2000	IT	MI990129 A1	25-07-2000
			AT	276076 T	15-10-2004
			BR	0000154 A	05-09-2000
			CA	2296834 A1	25-07-2000
			DE	69920155 D1	21-10-2004
			DE	69920155 T2	27-01-2005
			HR	20000038 A1	30-06-2001
			HU	0000231 A2	28-04-2001
			NO	20000347 A	26-07-2000
			PL	338028 A1	31-07-2000
			TR	200000226 A2	21-08-2000
			US	6409834 B1	25-06-2002
DE 4115047	C1	16-07-1992	FI	922052 A ,B,	09-11-1992
			IT	1254874 B	11-10-1995
US 4323314	A	06-04-1982	CA	1145328 A1	26-04-1983
			CH	628521 A5	15-03-1982
			SE	427328 B	28-03-1983
			DE	2916284 A1	04-12-1980
			FR	2432336 A1	29-02-1980
			GB	2020988 A ,B	28-11-1979
			SE	7908979 A	01-05-1981
			IT	1212386 B	22-11-1989
WO 02066214	A1	29-08-2002	IT	M020010033 A1	23-08-2002
			CA	2423324 A1	29-08-2002
			CN	1484572 T	24-03-2004
			DE	20119055 U1	04-04-2002
			EP	1361940 A1	19-11-2003
			US	2004022936 A1	05-02-2004

EPO FORM P0459

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