



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
06.05.2004 Bulletin 2004/19

(51) Int Cl.7: **D06B 19/00, D06B 23/02**

(43) Date of publication A2:
27.02.2002 Bulletin 2002/09

(21) Application number: **01116858.0**

(22) Date of filing: **10.07.2001**

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

(72) Inventors:
 • **Nakade, Kiyoshi**
Komatsu-shi, Ishikawa-ken (JP)
 • **Nomura, Eiichi**
Kahoku-gun, Ishikawa-ken (JP)

(30) Priority: **18.08.2000 JP 2000248178**

(74) Representative:
von Samson-Himmelstjerna, Friedrich R.,
Dipl.-Phys. et al
SAMSON & PARTNER
Widenmayerstrasse 5
80538 München (DE)

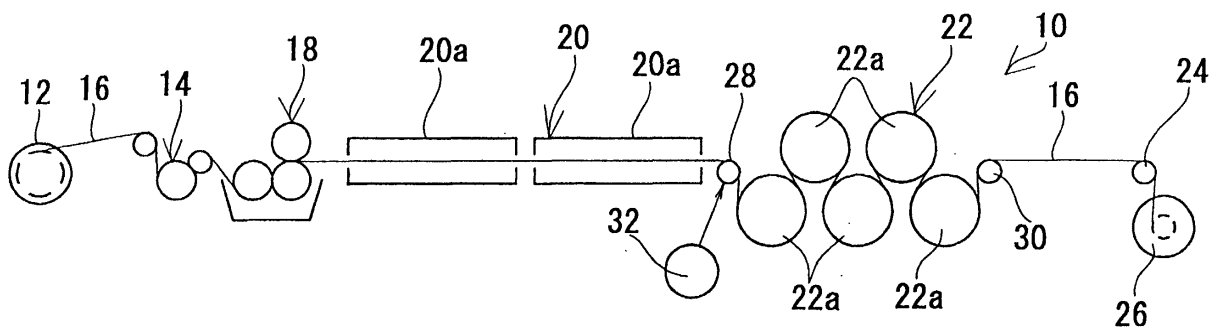
(71) Applicant: **TSUDAKOMA KOGYO KABUSHIKI**
KAISHA
Kanazawa-shi Ishikawa-Ken (JP)

(54) **Warp sizer**

(57) This warp sizer comprises means (32) for heating a guide roller (28) for guiding a sized warp sheet (16) to a cylinder dryer (22). The non-dried warp sheet is heated by the guide roller (28), whereby the size ad-

hered to the warp sheet is dried at least in the surface part of the warp sheet to be hardened to such an extent as not to adhere to the surface of the guide roller and adheres to the warp sheet

FIG. 1





European Patent
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EUROPEAN SEARCH REPORT

Application Number
EP 01 11 6858

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)
A	US 4 025 993 A (KURODA SUSUMU) 31 May 1977 (1977-05-31) * column 4, line 14 - line 25; figure 1 * ---	1	D06B19/00 D06B23/02
A	US 4 858 287 A (MAURER PETER ET AL) 22 August 1989 (1989-08-22) * column 4, line 2 - line 19; figure 1 * ---	1,4	
A	EP 0 091 549 A (VAL LESINA SPA) 19 October 1983 (1983-10-19) * claim 1; figure 1 * ---	1,4	
A	US 4 526 533 A (PABST MANFRED) 2 July 1985 (1985-07-02) * claim 1 * ---	2	
A	DE 35 00 557 A (VOITH GMBH J M) 17 July 1986 (1986-07-17) * claim 1 * -----	3	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			D06B D06C D02J D02H B65H F26B
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
THE HAGUE		16 March 2004	D'Souza, J
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 (P04C01)

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

EP 01 11 6858

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16-03-2004

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 4025993 A	31-05-1977	JP 1491237 C	07-04-1989
		JP 51119559 A	20-10-1976
		JP 63027460 B	03-06-1988
		DE 2613798 A1	21-10-1976
		FR 2307072 A1	05-11-1976
		GB 1538618 A	24-01-1979
		IT 1067203 B	16-03-1985
US 4858287 A	22-08-1989	DE 3724751 A1	09-02-1989
		AT 68536 T	15-11-1991
		DE 3865574 D1	21-11-1991
		DK 411588 A	26-01-1989
		EP 0301266 A1	01-02-1989
		ES 2026605 T3	01-05-1992
		FI 883488 A	26-01-1989
		JP 1033233 A	03-02-1989
		NO 883284 A	26-01-1989
		PT 88082 A	30-06-1989
EP 0091549 A	19-10-1983	IT 1150212 B	10-12-1986
		AT 24215 T	15-12-1986
		BR 8301010 A	22-11-1983
		CA 1244635 A1	15-11-1988
		DE 3368299 D1	22-01-1987
		EG 15505 A	31-03-1986
		EP 0091549 A1	19-10-1983
		ES 8403175 A1	01-06-1984
		GR 77911 A1	25-09-1984
		JP 1452357 C	25-07-1988
		JP 58197365 A	17-11-1983
		JP 61017944 B	09-05-1986
		MX 156396 A	18-08-1988
		YU 49983 A1	28-02-1986
US 4526533 A	02-07-1985	DE 3139254 C1	10-03-1983
		DE 3266853 D1	14-11-1985
		EP 0076383 A1	13-04-1983
		ES 8306397 A1	16-08-1983
		JP 1682659 C	31-07-1992
		JP 3050026 B	31-07-1991
		JP 58076568 A	09-05-1983
DE 3500557 A	17-07-1986	DE 3400087 C1	30-05-1985
		DE 3500557 A1	17-07-1986
		GB 2152633 A ,B	07-08-1985
		JP 60159414 A	20-08-1985

EPO FORM P0459

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

