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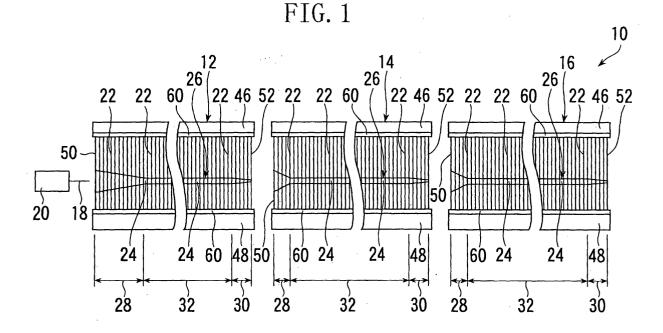
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(54) Reed for weaving

(57) In a reed for weaving in which a plurality of reed dents (22) each having a dented portion for guiding the weft are arranged such that the dented portions (24) are communicated to each other to form a guide groove for the weft, the dimension between the upper and lower faces of the dented portions (24) of the plurality of reed dents (22) located at the end portion on the downstream

side in the weft inserting direction are made smaller than the dimension between the upper and lower faces of the dented portions (24) of the reed dents (22) located in an intermediate portion between the end portion of the downstream side in the weft inserting direction and the end portion on the upstream side in the weft inserting direction. The reed is formed as a single reed or at least one of a plurality of divided reeds.





EUROPEAN SEARCH REPORT

Application Number EP 03 02 4387

	DOCUMENTS CONSID	ERED TO BE RELEVANT		
Category	Citation of document with in of relevant passa	ndication, where appropriate, ges	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.CI.7)
D,A	PATENT ABSTRACTS OF vol. 0150, no. 31 (24 January 1991 (19 & JP 2 269833 A (NI 5 November 1990 (19 * abstract *	C-0798), 91-01-24) SSAN MOTOR CO LTD),	1,6	D03D49/62 D03D47/30
A	DATABASE WPI Section Ch, Week 20 Derwent Publication Class F03, AN 2000- XP002305437 & WO 00/61846 A1 (1 19 October 2000 (20 * abstract *	s Ltd., London, GB; 647430 TAKAYAMA RIDO KK)	1-4,6	
A	US 5 570 726 A (WAR 5 November 1996 (19 * the whole documer	96-11-05)	1,2,4,6	
A	US 5 782 271 A (CZU 21 July 1998 (1998- * column 4, paragra paragraph 61 *	07-21)	1,2,5,6	TECHNICAL FIELDS SEARCHED (Int.Cl.7) D03D
A	Class F03, AN 1992- XP002307964	s Ltd., London, GB; 281860 (SAHI CHEM IND CO LTD)	1,4,6	
	The present search report has	oeen drawn up for all claims		
	Place of search	Date of completion of the search	<u> </u>	Examiner
	The Hague	29 November 2004	V B	Beurden-Hopkins, S
X : parti Y : parti docu A : tech O : non-	ATEGORY OF CITED DOCUMENTS cularly relevant if taken alone ioularly relevant if combined with anot ment of the same category nological background written disclosure mediate document	T: theory or principl E: earlier patent doc after the filing dat b: document cited in L: document cited for a: member of the so	cument, but publise e n the application or other reasons	shed on, or

EPO FORM 1503 03.82 (P04C01)



EUROPEAN SEARCH REPORT

Application Number

EP 03 02 4387

Category	Citation of document with ir of relevant passa	dication, where appropriate, ges	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.CI.7)
A	PATENT ABSTRACTS OF vol. 1998, no. 13, 30 November 1998 (1 & JP 10 204753 A (T LTD), 4 August 1998 * abstract *	998-11-30) OYOTA AUTOM LOOM WORKS	1,4,6	
A	PATENT ABSTRACTS OF vol. 1999, no. 03, 31 March 1999 (1999 & JP 10 317257 A (T 2 December 1998 (19 * abstract *	-03-31) AKAYAMA READ KK),	1,6	
Α	PATENT ABSTRACTS OF vol. 0161, no. 83 (6 May 1992 (1992-05 & JP 4 024247 A (AS 28 January 1992 (19 * abstract *	C-0936), -06) AHI CHEM IND CO LTD),	1	
				TECHNICAL FIELDS SEARCHED (Int.Cl.7)
	The present search report has b	peen drawn up for all claims		
	Place of search The Hague	Date of completion of the search 29 November 200	4 V B	Examiner Seurden-Hopkins, S
X : parti Y : parti docu	NTEGORY OF CITED DOCUMENTS cularly relevant if taken alone cularly relevant if combined with another of the same category nological background	T: theory or princip E: earlier patent de after the filing de D: document cited L: document cited	ble underlying the in ocument, but publis ate in the application for other reasons	nvention

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

EP 03 02 4387

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.

29-11-2004

US 5570726 A 05-11-1996 DE 4424271 C1 29-06- DE 59503421 D1 08-10- EP 0695821 A1 07-02- JP 2925983 B2 28-07- JP 8060494 A 05-03- US 5782271 A 21-07-1998 DE 19545840 C1 23-01- EP 0778365 A2 11-06-	WO 0061846 A1 19-10-2000 JP 2000355856 A 26-12- JP 2001073259 A 21-03- TW 491296 Y 11-06- US 5570726 A 05-11-1996 DE 4424271 C1 29-06- DE 59503421 D1 08-10- EP 0695821 A1 07-02- JP 2925983 B2 28-07- JP 8060494 A 05-03- US 5782271 A 21-07-1998 DE 19545840 C1 23-01- EP 0778365 A2 11-06- JP 9268454 A 14-10- JP 4194056 A 14-07-1992 NONE JP 10204753 A 04-08-1998 NONE JP 10317257 A 02-12-1998 NONE	WO 0061846 A1 19-10-2000 JP 2000355856 A 26-12- JP 2001073259 A 21-03- TW 491296 Y 11-06- US 5570726 A 05-11-1996 DE 4424271 C1 29-06- DE 59503421 D1 08-10- EP 0695821 A1 07-02- JP 2925983 B2 28-07- JP 8060494 A 05-03- US 5782271 A 21-07-1998 DE 19545840 C1 23-01- EP 0778365 A2 11-06- JP 9268454 A 14-10- JP 4194056 A 14-07-1992 NONE JP 10204753 A 04-08-1998 NONE JP 10317257 A 02-12-1998 NONE		Patent document ed in search report		Publication date		Patent family member(s)	Publicati date
US 5570726 A 05-11-1996 DE 4424271 C1 29-06- DE 59503421 D1 08-10- EP 0695821 A1 07-02- JP 2925983 B2 28-07- JP 8060494 A 05-03- US 5782271 A 21-07-1998 DE 19545840 C1 23-01- EP 0778365 A2 11-06- JP 9268454 A 14-10- JP 4194056 A 14-07-1992 NONE JP 10317257 A 02-12-1998 NONE	US 5570726 A 05-11-1996 DE 4424271 C1 29-06- DE 59503421 D1 08-10- EP 0695821 A1 07-02- JP 2925983 B2 28-07- JP 8060494 A 05-03- US 5782271 A 21-07-1998 DE 19545840 C1 23-01- EP 0778365 A2 11-06- JP 9268454 A 14-10- JP 4194056 A 14-07-1992 NONE JP 10204753 A 04-08-1998 NONE JP 10317257 A 02-12-1998 NONE	US 5570726 A 05-11-1996 DE 4424271 C1 29-06- DE 59503421 D1 08-10- EP 0695821 A1 07-02- JP 2925983 B2 28-07- JP 8060494 A 05-03- US 5782271 A 21-07-1998 DE 19545840 C1 23-01- EP 0778365 A2 11-06- JP 9268454 A 14-10- JP 4194056 A 14-07-1992 NONE JP 10317257 A 02-12-1998 NONE	JР	2269833	Α	05-11-1990	NONE		
DE 59503421 D1 08-10- EP 0695821 A1 07-02- JP 2925983 B2 28-07- JP 8060494 A 05-03- US 5782271 A 21-07-1998 DE 19545840 C1 23-01- EP 0778365 A2 11-06- JP 9268454 A 14-10- JP 4194056 A 14-07-1992 NONE JP 10204753 A 04-08-1998 NONE JP 10317257 A 02-12-1998 NONE	DE 59503421 D1 08-10- EP 0695821 A1 07-02- JP 2925983 B2 28-07- JP 8060494 A 05-03- US 5782271 A 21-07-1998 DE 19545840 C1 23-01- EP 0778365 A2 11-06- JP 9268454 A 14-10- JP 10204753 A 04-08-1998 NONE JP 10317257 A 02-12-1998 NONE	DE 59503421 D1 08-10- EP 0695821 A1 07-02- JP 2925983 B2 28-07- JP 8060494 A 05-03- US 5782271 A 21-07-1998 DE 19545840 C1 23-01- EP 0778365 A2 11-06- JP 9268454 A 14-10- JP 4194056 A 14-07-1992 NONE JP 10204753 A 04-08-1998 NONE	WO	0061846	A1	19-10-2000	JP	2001073259 A	26-12- 21-03- 11-06-
US 5782271 A 21-07-1998 DE 19545840 C1 23-01- EP 0778365 A2 11-06- JP 9268454 A 14-10- JP 10204753 A 04-08-1998 NONE JP 10317257 A 02-12-1998 NONE	US 5782271 A 21-07-1998 DE 19545840 C1 23-01- EP 0778365 A2 11-06- JP 9268454 A 14-10- JP 10204753 A 04-08-1998 NONE JP 10317257 A 02-12-1998 NONE	US 5782271 A 21-07-1998 DE 19545840 C1 23-01- EP 0778365 A2 11-06- JP 9268454 A 14-10- JP 10204753 A 04-08-1998 NONE JP 10317257 A 02-12-1998 NONE	US	5570726	Α	05-11-1996	DE EP JP	59503421 D 0695821 A 2925983 B 8060494 A	L 08-10- L 07-02- 2 28-07- 05-03-
JP 10204753 A 04-08-1998 NONE JP 10317257 A 02-12-1998 NONE	JP 10204753 A 04-08-1998 NONE JP 10317257 A 02-12-1998 NONE	JP 10204753 A 04-08-1998 NONE JP 10317257 A 02-12-1998 NONE	US	5782271	A	21-07-1998	EP	19545840 CI 0778365 A2	23-01-
JP 10317257 A 02-12-1998 NONE	JP 10317257 A 02-12-1998 NONE	JP 10317257 A 02-12-1998 NONE	JP	4194056	A	14-07-1992	NONE		
			JР	10204753	Α	04-08-1998	NONE		
			JΡ	10317257	Α		NONE		
			JР	4024247	Α		NONE		