



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:  
**05.09.2012 Bulletin 2012/36**

(51) Int Cl.:  
**D04B 35/06<sup>(2006.01)</sup>**

(43) Date of publication A2:  
**30.05.2012 Bulletin 2012/22**

(21) Application number: **11009237.6**

(22) Date of filing: **22.11.2011**

(84) Designated Contracting States:  
**AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR**  
Designated Extension States:  
**BA ME**

(71) Applicant: **Shima Seiki Mfg., Ltd**  
**Wakayama-shi,**  
**Wakayama 641-8511 (JP)**

(72) Inventor: **Sonomura, Minoru**  
**Wakayama 641-8511 (JP)**

(30) Priority: **22.11.2010 JP 2010260511**

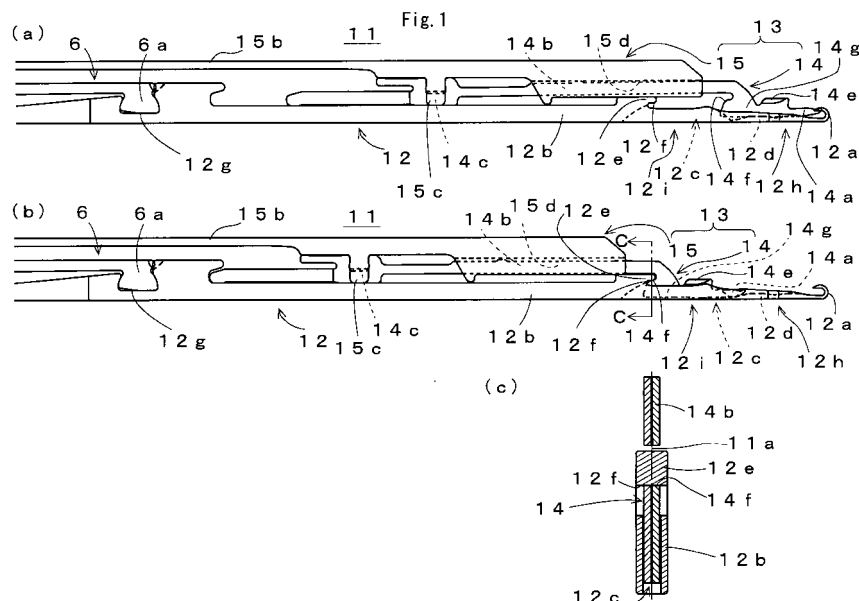
(74) Representative: **Wimmer, Hubert**  
**WAGNER & GEYER**  
**Gewürzmühlstrasse 5**  
**80538 München (DE)**

(54) **Compound needle for flatbed knitting machine**

(57) [Problem to be solved] There is provided a compound needle of a flatbed knitting machine that can reliably guide a tongue to be sunk in a slider groove at clearing time in which a slider having the tongue formed with two blades is moved back with respect to a needle body.

[Solution] In a clearing time, a head portion (14g) of a blade (14) is put in a clearing portion (12i) of a slider groove (12c), and a sloping portion (14f) is pressed with

a pressing portion (12f) on the under surface of an overhanging portion (12e). A tongue (14a) is sunk in the slider groove (12c), and a stitch can smoothly move back along a needle shank (12b). An arm (14b) is extended on the rearward beyond the overhanging portion (12e), so that it is possible to form a compound needle (11) by combining a needle body (12) with a slider (13) from above, even though a curving portion (14e) is provided subsequent to the tongue (14a).





## EUROPEAN SEARCH REPORT

Application Number  
EP 11 00 9237

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	GB 2 237 035 A (SHIMA SEIKI MFG [JP]) 24 April 1991 (1991-04-24) * page 4, line 4 - page 5, line 32; claim 1; figures 2, 3a-3d *	1,3	INV. D04B35/06
A,D	EP 1 229 158 A1 (SHIMA SEIKI MFG [JP]) 7 August 2002 (2002-08-07) * paragraphs [0003], [0004], [0010], [0016], [0022], [0030]; claim 2; figures 1-3, 4A-4D *	1,2	
			TECHNICAL FIELDS SEARCHED (IPC)
			D04B
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 31 July 2012	Examiner Sterle, Dieter
<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 11 00 9237

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.

31-07-2012

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
GB 2237035 A	24-04-1991	ES 2026020 A6	01-04-1992
		FR 2652593 A1	05-04-1991
		GB 2237035 A	24-04-1991
		IT 1242058 B	08-02-1994
		JP 1778168 C	28-07-1993
		JP 3119160 A	21-05-1991
		JP 4066941 B	26-10-1992
-----			
EP 1229158 A1	07-08-2002	DE 60031437 T2	01-02-2007
		EP 1229158 A1	07-08-2002
		ES 2270876 T3	16-04-2007
		JP 3577038 B2	13-10-2004
		TW 477845 B	01-03-2002
		US 6568223 B1	27-05-2003
		WO 0131101 A1	03-05-2001
-----			