

(19)



Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) Publication number:

0 253 292
A3

(12)

EUROPEAN PATENT APPLICATION

(21) Application number: 87109859.6

(51) Int. Cl.4: A41H 37/00

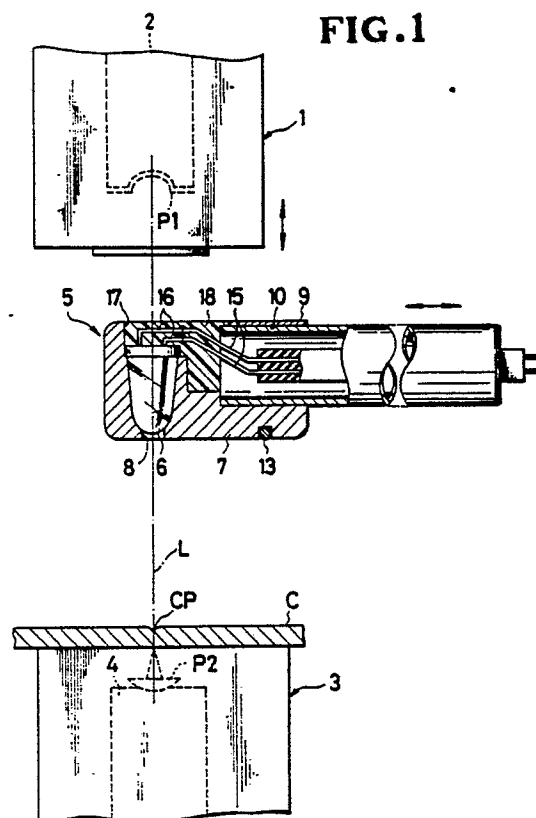
(22) Date of filing: 08.07.87

(30) Priority: 10.07.86 JP 105946/86 U

(43) Date of publication of application:
20.01.88 Bulletin 88/03(84) Designated Contracting States:
DE FR GB IT(88) Date of deferred publication of the search report:
14.09.88 Bulletin 88/37(71) Applicant: YOSHIDA KOGYO K.K.
No. 1 Kanda Izumi-cho Chiyoda-ku
Tokyo(JP)(72) Inventor: Ikehara, Ichiro
753, Kunugiyama Nyuzen-machi
Shimoniikawa-gun Toyama-ken(JP)
Inventor: Seki, Fumio
621, Koizumi-cho Horikawa
Toyama-shi Toyama-ken(JP)(74) Representative: Casalonga, Axel et al
BUREAU D.A. CASALONGA - JOSSE
Morassistrasse 8
D-8000 Munich 5(DE)

(54) Optical position indicator for fastener attaching machine.

(57) An optical position indicator (5), disposed between punch and die units (1), (3) of a fastener attaching machine and horizontally reciprocable in timed relation to vertical movement of the punch unit (1), includes a light source (6), and a holder (7) supporting thereon the light source (6) in such a posture that a light beam from the light source (6) is projected directly on the garment fabric (C) without any reflection.



EP 0 253 292 A3



EP 87 10 9859

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.4)		
D,Y	EP-A-0 147 809 (NIPPON NOTION KOGYO CO., LTD) * Page 3, line 13 - page 4, line 11; page 12, line 22 - page 14, line 6; figures 6,7 * & US-A-4 605 150 ---	1	A 41 H 37/00		
Y	US-A-4 438 567 (RAIHA) * Figure 2 * ---	1			
A	US-A-3 728 027 (WATANABE) * Figures 1,7 * ---	1			
A	US-A-3 964 661 (SCHMIDT et al.) * Figures 7,8 * -----	1			
			TECHNICAL FIELDS SEARCHED (Int. Cl.4)		
			A 41 H B 23 Q		
The present search report has been drawn up for all claims					
Place of search THE HAGUE		Date of completion of the search 14-06-1988	Examiner KARIPIDOU C.		
<table border="0"><tr><td>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</td><td>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</td></tr></table>				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
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				