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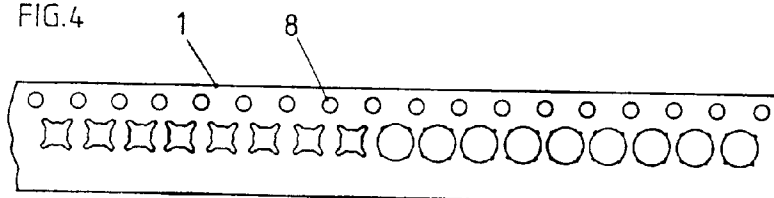
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(71) Applicant : **ARIEL INDUSTRIES PLC**  
**Ariel Works**  
**Temple Road**  
**Leicester LE5 4JG (GB)**  
  
 (72) Inventor : **Edwards, Cyril Kenneth**  
**c/o Ariel Industries PLC**  
**Ariel Works**  
**Temple Road Leicester LE5 4JG (GB)**  
  
 (74) Representative : **Tillbrook, Christopher John**  
**Chris J Tillbrook & Co**  
**5 Old Rectory Close**  
**Churchover**  
**Rugby, Warwickshire CV23 0EN (GB)**

(54) **Fastener carrier tape.**

(57) A fastener carrier tape (1), for fasteners (4), such as rivets, with a shank (15) and relatively enlarged head (16), incorporates successive fastener retention apertures (5) with supplemental peripheral weakening slits or cut-outs (6), to promote controlled tape deformation and failure and thus controlled discharge of the fastener head through the tape and retain fastener orientation ; and supplementary tape indexing apertures (8) corresponding to the fastener retention apertures for fastener positioning.

FIG.4





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# PARTIAL EUROPEAN SEARCH REPORT

Application Number

which under Rule 45 of the European Patent Convention EP 93 30 2559  
shall be considered, for the purposes of subsequent  
proceedings, as the European search report

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.5)
Y	FR-A-2 317 542 (FEINWERKBAU HELFER) * the whole document *	1-7	B65D73/02 B21J15/32
Y	WO-A-84 04710 (FURMA MANUFACTURING) * page 5, line 4 - page 7, line 31; figures *	1-7	
A	US-A-3 977 522 (GUALTHERUS) * figures 9,10 *	1	
			TECHNICAL FIELDS SEARCHED (Int.Cl.5)
			B65D B21J
INCOMPLETE SEARCH			
<p>The Search Division considers that the present European patent application does not comply with the provisions of the European Patent Convention to such an extent that it is not possible to carry out a meaningful search into the state of the art on the basis of some of the claims</p> <p>Claims searched completely : Claims searched incompletely : Claims not searched : Reason for the limitation of the search:</p> <p>see sheet C</p>			
Place of search THE HAGUE		Date of completion of the search 14 July 1994	Examiner Newell, P
<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 I : document cited for other reasons &amp; : member of the same patent family, corresponding document</p>			

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EP 93 30 2559.5

### CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- ☐ All claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for all claims.
- ☐ Only part of the claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claims:
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

### LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirement of unity of invention and relates to several inventions or groups of inventions.

namely:

see sheet -B-

- ☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid.
- namely claims:
- ☒ None of the further search fees has been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims.

namely claims 1-7



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EP 93 30 2559 -B-

**LACK OF UNITY OF INVENTION**

The Search Division considers that the present European patent application does not comply with the requirement of unity of invention and relates to several inventions or groups of inventions, namely:

1. Claims 1-8 concern a tape intended to carry discrete fasteners in successive retention holes, such holes being of a certain configuration. The problem addressed is one of maintaining fasteners in a pre-determined orientation when these are pressed from the carrier tape by a punch member

Claim 8 is disallowed by rule 29(6) EPC

2. Claims 9-11 concern a machine to apply a fastener to a workpiece. Specific aspects of such machine are devoted to driving a fastener tape in increments and sensing the position of a tape using an optical beam sensor.

The claims 9-11 are judged to form non-unity of invention a priori

The search has been carried out for the invention first mentioned in the claims.



EP 93 30 2559

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INCOMPLETE SEARCH

Claims searched completely: 1-7

Claim not searched: 8

See rule 29(6) EPC