

12 **EUROPEAN PATENT APPLICATION**

21 Application number: **84300814.5**

51 Int. Cl.<sup>3</sup>: **B 21 J 15/04**

22 Date of filing: **09.02.84**

30 Priority: **10.02.83 GB 8303633**

43 Date of publication of application:  
**19.09.84 Bulletin 84/38**

88 Date of deferred publication of search report: **05.12.84**

84 Designated Contracting States:  
**DE FR GB IT SE**

71 Applicant: **ARMSTRONG FASTENINGS LIMITED**  
**Clough Road**  
**Hull North Humberside, HU6 7PR(GB)**

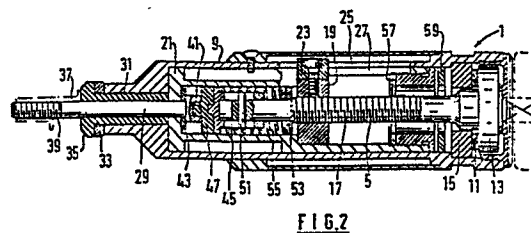
72 Inventor: **Stephens, Ronald Bertram**  
**169 Sigston Road**  
**Beverley North Humberside(GB)**

74 Representative: **Stringer, David Hiram et al,**  
**W.P. THOMPSON & CO Coopers Building Church Street**  
**Liverpool L1 3AB(GB)**

54 **Apparatus for installing rivet nuts.**

57 Apparatus for installing rivet nuts comprises a body (9) having therein a spindle (5) which is drivable in the forward and reverse directions and a threaded mandrel (29) for receiving the rivet nut, and an anvil (35) against which the rivet nut abuts.

In order to avoid damaging of the rivet nut when crimping it in position, a clutch (45, 47) is disposed between the spindle and threaded mandrel to prevent rotation of the latter when a predetermined torque is reached. The mandrel is engaged by a pull sleeve (21) and an axial load is applied to the mandrel and hence to the rivet nut by way of a pull nut (19) which is received threading on the spindle and which co-operates with the pull sleeve (21).



**FIG. 2**



European Patent  
Office

# EUROPEAN SEARCH REPORT

0119007

Application number

EP 84 30 0814

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. <sup>3</sup> )
Y	EP-A-0 043 217 (TUCKER) * Claim 1, figures 2,6; pages 4,5 *	1,3-5	B 21 J 15/04
Y	US-A-4 063 443 (YARBROUGH) * Figure 2, positions 27,34, column 6, lines 27-35 *	1,3-5	
A	US-A-4 074 554 (SUMMERLIN) * Figure 1; columns 3-6 *	1,4,5,8	
A	US-A-4 321 814 (MARTIN)		
A	US-A-2 753 072 (MITCHELL)		
			TECHNICAL FIELDS SEARCHED (Int. Cl. <sup>3</sup> )
			B 21 J 15/00 B 25 B 27/00
The present search report has been drawn up for all claims			
Place of search BERLIN		Date of completion of the search 14-08-1984	Examiner SCHLAITZ J
CATEGORY OF CITED DOCUMENTS		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	
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			