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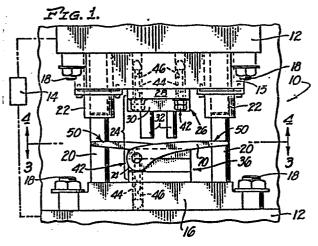
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(54) Combination die and die support structures.

67 The task of securing dies (26,36) of a die set (24) to appropriate supports (15,16) such as for example, the die shoes of a set of die shoes or to upper and lower platens (12) of a punch press so that the dies are in precise alignment can be simplified by utilising expandable diameter fasteners (48,50) to secure the dies to the supports. Each fastener used is located within a hole (44) extending through one of the dies and within an aligned hole (46) in the adjacent support. The fasteners used are of such a character as to be capable of firmly securing the dies and the supports even if such holes of a set of such holes are of not precisely the same diameter. Preferably each die is secured in place utilising at least two of such fasteners.





EUROPEAN SEARCH REPORT

Application number

83 30 1693 EP

	DOCUMENTS CONS	IDERED TO BE RELEVANT		
Category	Citation of document with indication, where appropriate, of relevant passages		Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 3)
Y	US-A-4 103 574 (GREER) * column 6, line 10 - column 9, line 15; figures *		1-5	B 21 D 37/14
D,Y	US-A-3 192 820 * column 4, li line 34; figures	ne 13 - column 8,	1-5	
A	US-A-2 433 617	- (MARSILIUS)		
A	DE-A-1 527 066	- (WITZIG et al.)		
A	US-A-2 573 928	- (PETER)		TECHNICAL FIELDS
A	US-A-4 143 574	- (RYSER et al.)		B 21 D B 21 J B 23 B
A	US-A-1 801 490	(FALSTROM)		B 23 C B 23 Q B 29 C B 29 F
		· • •		B 30 B F 16 B
	The present search report has b	een drawn up for all claims		
Place of search THE HAGUE Date of completion of the search 22-10-1984		ROSEN	Examiner NBAUM H.F.J.	
Y: pe do A: te O: no	CATEGORY OF CITED DOCL articularly relevant if taken alone articularly relevant if combined w ocument of the same category ochnological background on-written disclosure termediate document	ith another D: document L: document	ing date cited in the ap cited for other	lying the invention but published on, or plication reasons