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54 **Air transfer system for a shell press.**

57 An air transfer system for a shell press is provided which air conveys a blanked and formed shell (66) from a blanking and forming die station (14) in the shell press to a curling die station (16) in the same shell press. The air transfer system further provides for the blanked and formed part to be air conveyed within the curling die, and after the shell is curled within the die, provides for the curled shell to be air ejected from the curling die for subsequent fluid conveyance therefrom. A guide track (70) extending between the die stations is just slightly wider than the diameter of the shell being conveyed and the fluid conveyance is provided by a hollow tube (72) disposed in the upwardly facing surface of the guide track. The hollow tube has a diameter much smaller than the width of the guide track and shell diameter and further has a plurality of shaped openings (74) which provide perpendicular and parallel air velocity components relative to the guide track when high pressure air is provided through the hollow tube. The curling station includes an air escapement mechanism for conveying the part through it.

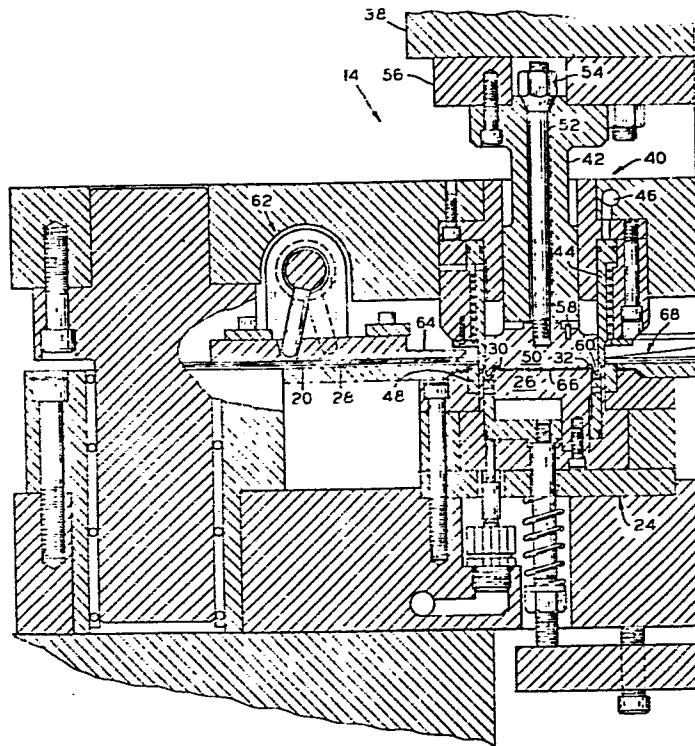


FIG. 1A

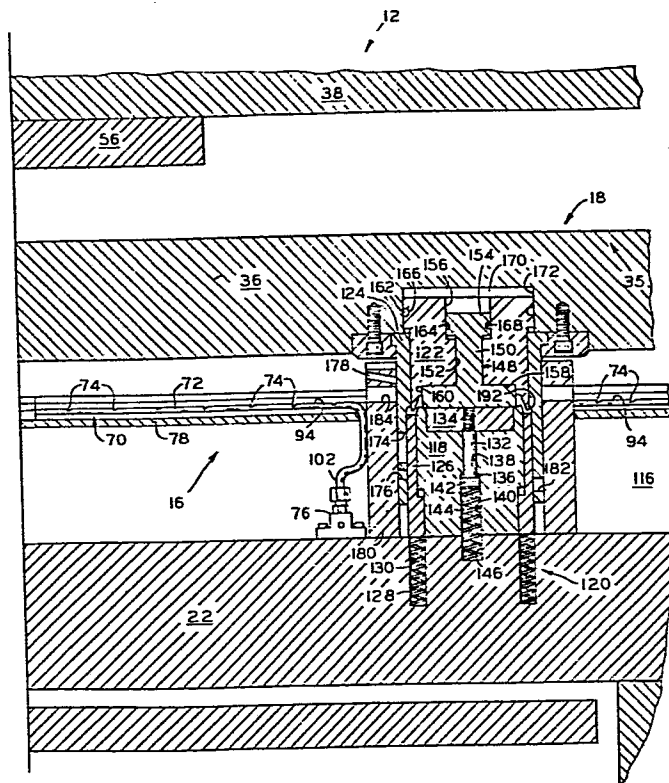


FIG. 1B



European Patent
Office

EUROPEAN SEARCH REPORT

0106435

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EP 83 30 3967

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. ³)
D,A	US-A-3 902 347 (RIDGWAY)		B 21 D 51/44 B 21 D 43/18 B 21 D 51/26
D,A	--- US-A-3 645 581 (LASCH)		
D,A	--- US-A-3 874 740 (HURD)		
D,Y	--- US-A-3 941 070 (KAMINSKI) * Claims 1-4; figures 1, 3 *	1,2	
D,Y	--- US-A-3 953 076 (HURD) * Claim 1; figures 1, 3, references 20, 24 *	1,2	
A	--- US-A-3 537 291 (HAWKINS) * Claim 1; figure 1 *	1	TECHNICAL FIELDS SEARCHED (Int. Cl. ³)
A	--- US-A-4 315 705 (FLINT) * Claim 1 *		B 21 D 43/00 B 21 D 45/00 B 21 D 51/00 B 65 G 51/00

The present search report has been drawn up for all claims			
Place of search BERLIN		Date of completion of the search 13-03-1984	Examiner SCHLAITZ J
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