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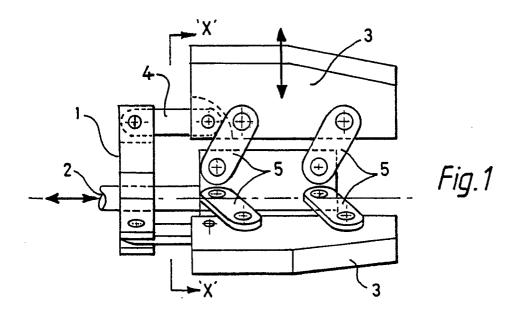
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54 Method and apparatus for forming ducting.

The present invention provides a method for forming polygonal ducting from an intially circular cross-section duct by radially expanding a mandrel within the duct so as to cause radial deformation of

the duct into the desired shape. The invention also provides a mandrel for use in the method of the invention.





EUROPEAN SEARCH REPORT

EP 90 31 2319

D	OCUMENTS CONS	DERED TO BE I	RELEVANT	
Category		th indication, where appropriate, evant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. CI.5)
Y	GB-A-1 425 778 (OY NOK * page 2, line 74 - page 3, li	•	1-9	B 21 D 15/02
Υ	FR-A-7 322 96 (LEVY) * page 1, line 40 - page 2, line 37; figures 1-4 *		1-9	
Α	FR-A-2 125 149 (FUTS METALLIQUES GALLAY S.A.) * page 4, line 1 - page 8, line 6; figures 7-10 *		.A.) 1,8	
Α	US-A-3 981 172 (HESS E ⁻¹ column 2, line 24 - column		1	
А	US-A-4 004 444 (POLLAR * column 5, line 7 - column 	•	10	
				TECHNICAL FIELDS SEARCHED (Int. Cl.5)
				B 21 D
				•
	The present search report has I	peen drawn up for all claims		
	Place of search Date of completion of se		search	Examiner
	The Hague	02 May 91		GARELLA M.G.C.D.
CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same catagory A: technological background O: non-written disclosure P: intermediate document			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	