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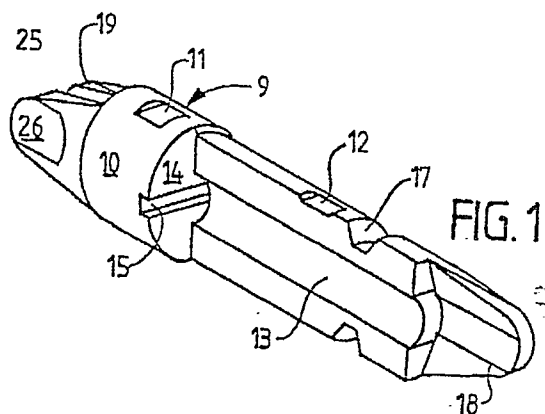
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(54) **Process for forming metallic articles and castings used therein.**

(57) A process for forming a metallic article (9) such as a fluid actuated ram assembly and particularly a hydraulically actuated ram assembly which includes as an initial step production of a raw casting from a mould. Subsequently one or more transverse parting operations are effected to the casting so as to form components of the article which may subsequently be attached to form the article. Suitably the raw casting is mounted on a lathe for various machining operations to be effected prior to carrying out the parting operations.

There is also provided a raw casting (9) which has a rear portion (10) having a bifurcated end (19) as well as front portion having a bifurcated end (18). The raw casting may also include a barrel portion (16) having an internal bore (13). The rear portion may serve as a precursor for a rear end cap (49) and associated clevis (60) of the hydraulically actuated ram assembly and the front portion may serve as a precursor for the rod clevis (32) of the hydraulically actuated ram assembly which may be screw threadedly attached to a piston rod (51) or piston of the hydraulically actuated ram assembly.





EP 85 11 2622

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. 4)
X	US-A-2 553 935 (W.A. PARKS et al.) * Column 3, lines 22-63 * --	1,4,7, 19,20	B 22 D 25/02 B 23 P 15/00
A	EP-A-0 054 286 (ATOMAC DIETER BRUTSCH KG) * Page 2, lines 3-10 * --	1	
A	US-A-3 571 883 (CH. DOOLITTLE) * Column 1, lines 46-75 * --	2,3,14, 18,21	
A	US-A-4 384 511 (R.J. MEFFORD) * Figure 1; column 2, lines 6-18 * -----	2,3,14, 18,21	
			TECHNICAL FIELDS SEARCHED (Int. Cl. 4)
			B 22 D
THIS IS A PRELIMINARY REPORT FOR INFORMATIONAL PURPOSES ONLY			
Place of search THE HAGUE		Date of completion of the search 24-11-1988	Examiner DOUGLAS
CATEGORY OF CITED DOCUMENTS			
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		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	



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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.

X 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 1-21: Forming components of an article from a single casting
2. Claims 22-29: A casting comprising bifurcated front and rear ends and a barrel portion with an internal bore

- ☐ 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: 1-21