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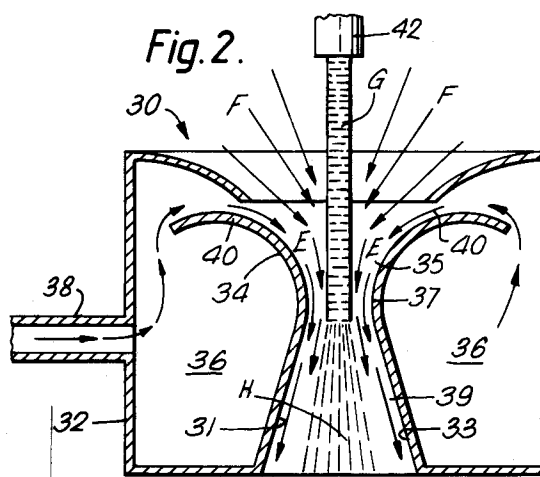
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**11.03.92 Bulletin 92/11**(71) Applicant: **ROLLS-ROYCE plc**  
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**Derby, DE2 8BJ(GB)**(54) **An apparatus and method for atomising a liquid.**

(57) An apparatus for atomising a liquid comprises an annular housing (32) which has a radially inner curved annular Coanda surface (34). The housing (32) has an outlet (40) in its radially inner circumferentially extending side which supplies a first pressurised fluid onto the Coanda surface (34). Diametrically opposite, confronting, surface portions (31,33) of the Coanda surface (34) define a convergent/divergent passage (35,37,39). A liquid is discharged from a nozzle (42) into the convergent portion (35) of the convergent/divergent passage so that a stream of liquid is positioned between the confronting surface portions (31,33). A second fluid is entrained by the first fluid (F) flowing over the Coanda surface (34). The second fluid (G) flows between the first fluid (E) and the stream of liquid, and the liquid is atomised as it interacts with the flow field generated by the apparatus. The liquid stream is automatically centralised between the confronting surface portions (31,33) to give uniform atomisation.





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## EUROPEAN SEARCH REPORT

Application Number

**EP 91 30 0236**

### 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.5)
X	BE-A-507 185 (SEBAC NOUVELLE SA) * page 1, line 1 - line 4 *** page 4, line 14 - line 26 *** page 5, line 4 - line 15 *** page 5, line 46 - line 58; figures 1,4 **	1-4,9, 17-21	B 05 B 7/00 B 05 B 7/04 C 23 C 4/12
Y	— — —	5-8, 12-15, 22-31	
Y	GB-A-2 146 662 (TELEDYNE INDUSTRIES INC.) * claims 1-30; figures 1,2 **	5-8, 12-15, 22-31	
X	PATENT ABSTRACTS OF JAPAN vol. 13, no. 224 (C-599)(3572) 24 May 1989 & JP-A-1 034 458 ( MITSUI ENG. & SHIPBUILD CO LTD ) 3 February 1989 * abstract **	1-3,9, 17-21	
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The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			B 05 B C 23 C
Place of search		Date of completion of search	Examiner
The Hague		08 January 92	BREVIER F.J.L.
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