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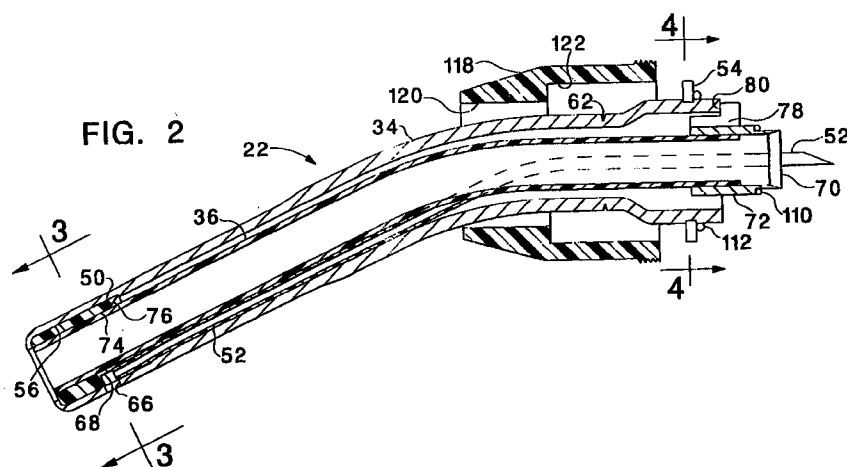
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(54) **Spout constructions for fuel dispensing nozzles and methods for making same**

(57) A vapor recovery nozzle includes a spout construction comprising an outer aluminum tube (34) and an inner nylon tube (36). The distal ends (50,70) of the tubes are joined so that the inner tube defines a central fuel passage and, in combination with the outer tube, defines a generally annular vapor return passage. A distal end portion of the outer tube has a reduced wall thickness and its inner end is expanded to mount a locator ring (54) thereon. The spout assembly is telescoped into an adapter that connects the fuel and vapor passages to corresponding passages in the nozzle body (24). A spout nut threads into the nozzle body and

engages the locator ring to mount the spout (22) on the nozzle. The outer spout tube (34) is formed by lathe operations which include turning a fracture groove (62) adjacent its inner end, and, thereafter bending the tube to angle the distal end portion of the tube downwardly from its inner end. A second embodiment teaches the use of structural, synthetic resins in forming the outer spout tube. In an alternate embodiment the outer spout tube is compositely formed an outer end portion that provides increased strength for the that portion, where a thin wall tube is employed.



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EUROPEAN SEARCH REPORT

Application Number
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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.6)
Y	US 4 351 375 A (POLSON CHARLES L) 28 September 1982	1,3	B67D5/378
A	* the whole document *	2,4-7,9,11	
Y	DE 43 00 911 A (DAIMLER BENZ AG) 21 July 1994 * column 2, line 26 - line 51; figures *	1,3	
A	WO 94 04457 A (SABER EQUIPMENT CORP) 3 March 1994 * page 6, paragraph 2 - page 10, paragraph 1; figures 1-5 *	1,5,7,9,11	
A	WO 93 17913 A (DAYCO PRODUCTS INC) 16 September 1993 * abstract; figures *	1,7	
A	US 5 289 856 A (STROCK DENNIS J ET AL) 1 March 1994		TECHNICAL FIELDS SEARCHED (Int.Cl.6)
A	US 5 285 744 A (GRANTHAM RODGER P ET AL) 15 February 1994		B67D
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 16 September 1997	Examiner Sideris, M
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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</p>			

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