

12

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⑤④ Liquid/abrasive jet cutting apparatus.

57) The Apparatus confines abrasive slurry in one chamber (26b) of a dual-chamber reservoir (26) having a piston (28) sealing between the two chambers. Pump-pressured water is conducted to the other chamber (26a)(a) to displace the piston (28) and, consequently, (b) to pressure the slurry. A fluid line (34) conveys the pressured slurry to a central, orifice-terminated, channel formed in the axial center of a nozzle (22), and another fluid line (20) conveys pump-pressured water to an annular conduit, formed in said nozzle (22), which circumscribes the central channel. The annular conduit also terminates in an orifice. Both orifices are axially aligned, the latter one being of greater diameter than the former. Upon emerging from the aforesaid conduit and channel, the water and slurry accelerate together in a convergent chamber of the nozzle to discharge via the larger-diameter, final exit orifice.

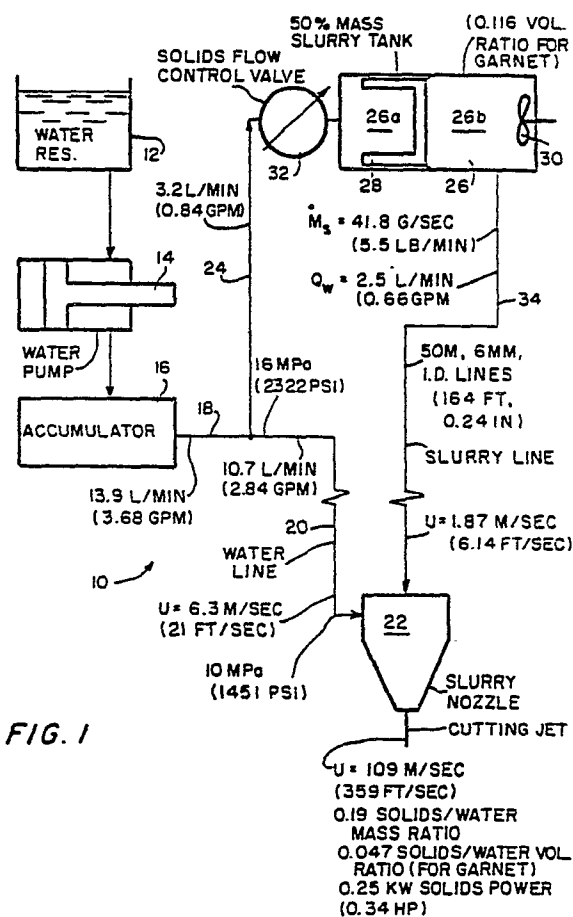


FIG. 1

EP 0 322 485 A3



EP 87 30 9599

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)
E	US-A-4 707 952 (KRASNOFF) * Whole document *	1-13	B 26 F 3/00 B 24 C 7/00 B 24 C 5/04
X	WO-A-8 702 290 (BRITISH HYDROMECHANICS) * Page 10, line 32 - page 11, line 33; figure 6 *	1,3,6	
Y		8-13	
A		2,4,7	
A	US-A-4 037 992 (UCHIDA) * Column 1, lines 24-35; figure 6 *	1,2,7	
A	US-A-2 985 050 (SCHWACHA) * Column 4, lines 22-42; figure 2 *	4	
Y	GB-A- 663 604 (KRANS) * Page 1, lines 76-86; page 2, lines 4-11; figure *	8-13	
A	US-A-3 612 405 (HEINRICH)		
A	US-A-4 545 157 (SAURWEIN)		
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			B 26 F B 24 C B 05 B
Place of search THE HAGUE		Date of completion of the search 31-10-1989	Examiner HUGGINS J.D.
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			