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(54) Title: FLUID DELIVERY SYSTEM FOR AN INK JET PRINT HEAD

(57) Abstract: A fluid delivery system of the invention comprises one or more intercoupled cartridge assemblies. Each cartridge assembly comprises a plurality of interconnected cartridges, each comprising a reservoir for holding jetting fluid and an ink jet print head operatively connected to the reservoir. Each cartridge assembly is interconnected by a first interconnection assembly and a second interconnection assembly. The first interconnection assembly maintains the plurality of interconnected cartridges at a negative pressure. The second interconnection assembly maintains at least an essentially equal level of jetting fluid within each of the reservoirs of the plurality of cartridges. Jetting fluid is replenished in the plurality of interconnected cartridges by replenishing jetting fluid in a selected cartridge and using the second interconnection assembly to distribute the jetting fluid among the reservoirs of the interconnected cartridges. A sensor is coupled to the selected reservoir to monitor the level of jetting fluid in the cartridge assembly.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : B41J 2/175 US CL : 347/85 According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) U.S. : 347/85, 5, 7, 84, 86, 87		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched NONE		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) Please See Continuation Sheet		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4,831,389 A (CHAN) 16 May 1989 (16.05.1989) see entire document.	1-4, 8, 9, 12, 16, 17
A	US 6,234,615 B1 (TSUKUDA) 22 May 2001 (22.05.2001) see entire document.	1-17
A	US 5,189,438 A (HINE et al) 23 February 1993 (23.02.1993) see entire document.	1-17
A	US 4,432,005 A (DUFFIELD et al) 14 February 1984 (14.02.1984) see entire document.	1-17
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Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230	Authorized officer <i>Jose M Dees</i> Jose Dees Telephone No. 571-272-1569	

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Continuation of B. FIELDS SEARCHED Item 3:

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