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[Continued on next page]

(54) Title: MULTI-STAGE AERATION APPARATUS

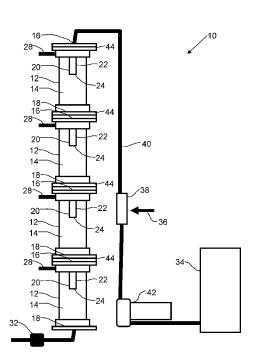


FIG. 1

(57) Abstract: A multi-stage aeration apparatus includes at least two vertically oriented aeration modules. Each aeration module defines a vertically elongated aeration chamber having a top inlet and a bottom outlet. The bottom outlet of each of the aeration modules feeds a fluid stream comprising liquid and gas into the top inlet of an underlying one of the aeration modules. Each aeration module has an aeration head connected to the top inlet, such that the fluid stream passing through the top inlet into the aeration chamber must pass through the aeration head, the aeration head aerating the liquid with the gas in the fluid stream.





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A. CLASSIFICATION OF SUBJECT MATTER

IPC: B01F3/04 (2006.01), B01F5/00 (2006.01), C02F1/74 (2006.01) 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)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic database(s) consulted during the international search (name of database(s) and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, wh	ere appropriate, of the relevant	Relevant to claim No.	
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А	Abstract, Fig 1 EP 0827765 A2 (YUKIHIRO, Y. et al.) 1998)	11 March 1998 (11-03-	1 to 15	
А	the whole document		1 to 15	
А	US 5049320 A (WANG, L. K. et al.) 1991) the whole document	17 September 1991 (17-09-	1 to 15	
A	WO 2011/073977 A1 (SHECHTER, R. I. et a 2011) the whole document	1.) 23 June 2011 (23-06-	1 to 15	

[]	Further	documents are listed in the continuation of Box C.	[X]	See patent family annex.	
* "A" "E" "L"	docum to be of earlier filing docum cited t special docum	nent which may throw doubts on priority claim(s) or which is o establish the publication date of another citation or other I reason (as specified) nent referring to an oral disclosure, use, exhibition or other means	"T" "X" "Y"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention document of particular relevance; the claimed invention cannot be considered novel or cannot be considered novel or cannot be considered novel or cannot be to the document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art	
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Date of the actual completion of the international search		Date	Date of mailing of the international search report		
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INTERNATIONAL SEARCH REPORT Information on patent family members

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