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(54) Title: DEAERATION APPARATUS AND METHOD

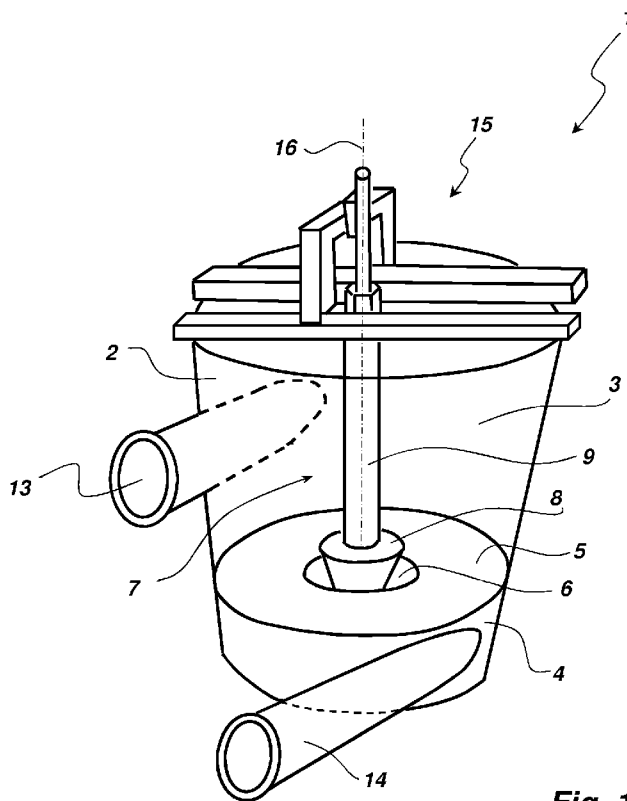
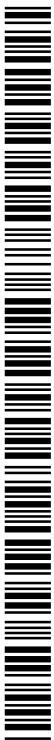


Fig. 1

(57) Abstract: The present invention provides an apparatus (1) for deaerating a feed fluid, the apparatus comprising a chamber (3) for separating said feed fluid into a first component (11) substantially comprising froth or gas and a second component (12) substantially comprising deaerated liquid or sludge; an opening (6) for fluid flow from said separating chamber (2), and a device (7) for restricting fluid flow through said opening, wherein said opening (6) and said flow restricting device (7) induce a rotational flow of said feed fluid in said separating chamber such that said rotational flow generates a centrifugal vortex to separate said feed fluid into said first component (11) and said second component (12). A method of for deaerating a feed fluid is also provided.





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<b>A. CLASSIFICATION OF SUBJECT MATTER</b> INV. B03D1/14      B04C11/00      C02F1/20      B01D21/00      B01D19/00 ADD.				
According to International Patent Classification (IPC) or to both national classification and IPC				
<b>B. FIELDS SEARCHED</b>				
Minimum documentation searched (classification system followed by classification symbols) B03D B04C C02F B01D				
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched				
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) EPO-Internal, WPI Data				
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>				
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.		
X	DE 27 27 398 A1 (KLOECKNER HUMBOLDT DEUTZ AG) 4 January 1979 (1979-01-04) paragraph [0011] - paragraph [0013] claims 1-6; figures 1-2 -----	1-9, 11-29		
A	EP 1 297 875 A1 (TECHSPACE AERO SA [BE]) 2 April 2003 (2003-04-02) claims 1-7; figures 1-3 -----	1-29		
A	EP 0 452 181 A1 (HISPANO SUIZA SA [FR]) 16 October 1991 (1991-10-16) figures 1-3 -----	16		
A	EP 0 307 965 A1 (MITSUBISHI OIL CO [JP]) 22 March 1989 (1989-03-22) claims 1-3; figures 1-4 -----	1-29		
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<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.				
* Special categories of cited documents : <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none; vertical-align: top;">                     "A" document defining the general state of the art which is not considered to be of particular relevance                      "E" earlier application or patent but published on or after the international filing date                      "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)                      "O" document referring to an oral disclosure, use, exhibition or other means                      "P" document published prior to the international filing date but later than the priority date claimed                 </td> <td style="width: 50%; border: none; vertical-align: top;">                     "T" 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                      "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone                      "Y" 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                      "&amp;" document member of the same patent family                 </td> </tr> </table>			"A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed	"T" 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 "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" 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 "&" document member of the same patent family
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International application No  
PCT/IB2012/057051

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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Information on patent family members

International application No <b>PCT/IB2012/057051</b>
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