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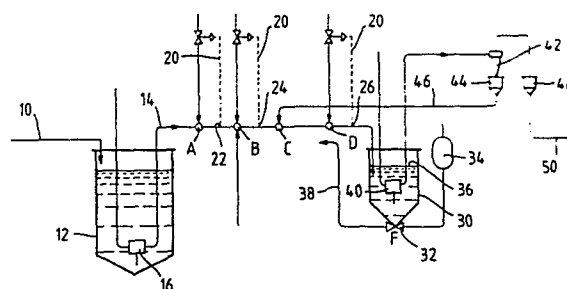
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54 **Chemical treatment of liquors.**

57 A liquor, which may contain heavy metal species, is passed along a pipeline (14) provided with a cascade of fluidic mixing devices (A, B, C D) and a reagent or reagents is/are combined and thoroughly mixed with the liquor via the fluidic mixing devices (A, B, C, D). A pipeline section is disposed downstream of each mixing device (A, B, C, D) and the pipeline section is dimensioned so that the liquor and reagent(s) are afforded to residence time for reaction as they flow through it. Following passage through the cascade of mixing devices (A, B, C, D) the mixed liquor/reagent(s) are fed into a settling vessel (30) from which part of the contents is fed to a centrifugal separator (42) to effect liquid/solid separation. A proportion of the solid separated is recycled back to the cascaded mixing pipeline (14) to provide nuclei to enhance precipitation and/or increase concentration of a constituent, such as a floc-forming agent, used in the treatment of the liquor.

Fig. 1.





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.4)
A	GB-A-1 175 514 (KODAK) * Claims 1,3,4; figure 1 * ---	1-3,8-10	G 21 F 9/10
A	GB-A-2 036 586 (UPJOHN CO.) * Claims 1,15-17; figure 1 * ---	1-3,8-10	
A	FR-A-2 389 408 (BAYER) * Claims 1,5,7 * ---	1-15	
A	GB-A-1 237 229 (SWIFT) * Claim 1; figure 1 * -----	1-15	
			TECHNICAL FIELDS SEARCHED (Int. Cl.4)
			G 21 F B 01 F B 01 J
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 21-11-1989	Examiner NICOLAS H.J.F.
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			