



**EUROPEAN PATENT APPLICATION**

Application number : **93300841.9**

Int. Cl.<sup>5</sup> : **G21F 9/10, G21F 9/06**

Date of filing : **04.02.93**

Priority : **10.02.92 JP 23733/92**

Date of publication of application :  
**18.08.93 Bulletin 93/33**

Designated Contracting States :  
**FR GB**

Date of deferred publication of search report :  
**15.12.93 Bulletin 93/50**

Applicant : **HITACHI, LTD.**  
**6, Kanda Surugadai 4-chome**  
**Chiyoda-ku, Tokyo 101 (JP)**

Inventor : **Fukasawa, Tetsuo**  
**23-15, Higashi Oonuma-cho 3-chome**  
**Hitachi-shi, Ibaraki 316 (JP)**

Inventor : **Chino, Koichi**  
**26-3, Nakanarusawa-cho 2-chome**  
**Hitachi-shi, Ibaraki 316 (JP)**  
Inventor : **Matsuda, Masami**  
**10-6, Mikanohara-cho 2-chome**  
**Hitachi-shi, Ibaraki 316 (JP)**  
Inventor : **Baba, Tsutomu**  
**Kojin Apt. D102, 4-D102 Higashi Taga-cho**  
**3-chome**  
**Hitachi-shi, Ibaraki 316 (JP)**  
Inventor : **Sasahira, Akira**  
**High Village Oonuma, 2-11-2, Oonuma-cho**  
**2-chome**  
**Hitachi-shi, Ibaraki 316 (JP)**  
Inventor : **Nakamura, Tomotaka**  
**Jikyou-ryo, 12-1, Ayukawa-cho 6 chome**  
**Hitachi-shi, Ibaraki 316 (JP)**

Representative : **Stoner, Gerard Patrick et al**  
**Mewburn Ellis 2 Cursitor Street**  
**London EC4A 1BQ (GB)**

**Methods and apparatus for treating aqueous industrial effluent.**

Aqueous industrial effluent containing dissolved species which it is desired to separate from the effluent, such as valuable, poisonous or radioactive metal ions, is treated preliminarily to release gas which is, or is derived from, secondary dissolved species which tend to stabilise the desired species in solution in the effluent. The effectiveness of a subsequent separation treatment for the desired species, such as coprecipitation, ion exchange, adsorption or solvent extraction, is thereby increased.



European Patent  
Office

EUROPEAN SEARCH REPORT

Application Number

EP 93 30 0841

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)
Y	EP-A-2 655 469 (DEUTSCHE GESELLSCHAFT FÜR WIEDERAUFARBEITUNG VON KERNBRENNSTOFFEN) * claims 1,5,6,10; figure * ---	1-18	G21F9/10 G21F9/06
Y	DE-A-1 935 273 (GESELLSCHAFT FÜR KERNFORSCHUNG) * claims 1-4 * ---	1-18	
Y	FR-A-2 641 119 (COMMISSARIAT A L'ENERGIE ATOMIQUE) * claim; figure * ---	1-18	
Y	EP-A-0 031 410 (KERNFORSCHUNGSZENTRUM KARLSRUHE) * abstract; claims 1-8; figure * -----	1-18	
			<b>TECHNICAL FIELDS SEARCHED (Int. Cl.5)</b>
			G21F
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 20 OCTOBER 1993	Examiner NICOLAS H.J.F.
<b>CATEGORY OF CITED DOCUMENTS</b> 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	

EPO FORM 1503 03.82 (P0401)