



(86) Date de dépôt PCT/PCT Filing Date: 1997/03/03

(87) Date publication PCT/PCT Publication Date: 1998/09/11

(45) Date de délivrance/Issue Date: 2005/04/05

(85) Entrée phase nationale/National Entry: 1999/09/02

(86) N° demande PCT/PCT Application No.: GB 1997/000585

(87) N° publication PCT/PCT Publication No.: 1998/039491

(51) Cl.Int.⁶/Int.Cl.⁶ C22B 15/00, C22B 3/18

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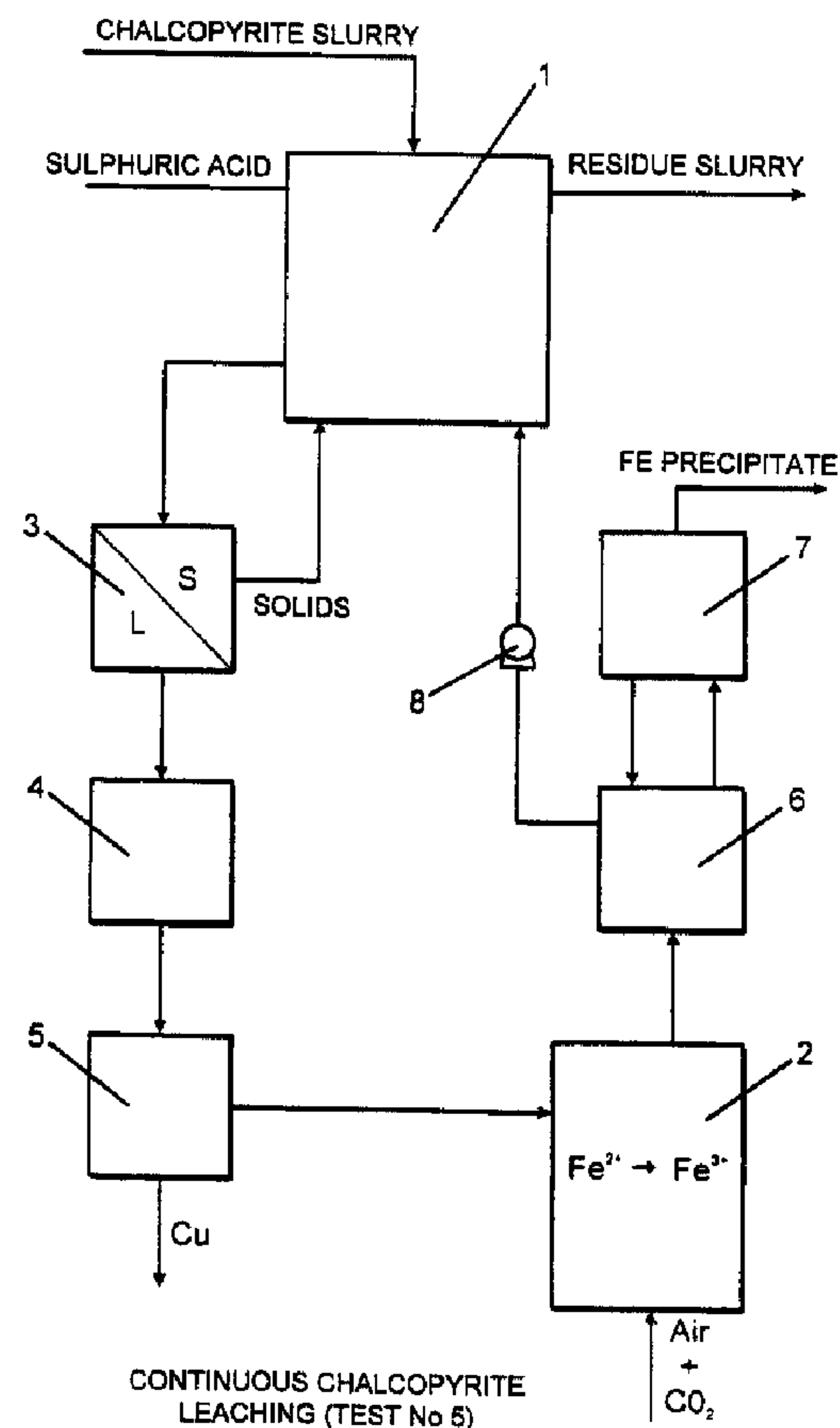
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(54) Titre : PROCEDE DE LIXIVIATION DE CHALCOPYRITE

(54) Title: A PROCESS FOR THE LEACHING OF CHALCOPYRITE



(57) Abrégé/Abstract:

A process is provided for the leaching of copper from chalcopyrite using ferric sulphate in which acceptable rates of leaching are achieved by controlling the surface potential of the chalcopyrite to an empirically determined "window" within the broad range of

(57) **Abrégé(suite)/Abstract(continued):**

350 to 450 mV. The most effective process conditions involve the selection of the said surface potential; the leach temperature; the pH of the leach solution; and the fineness of the grind of the chalcopyrite. The invention may be applied to both tank leaching and heap leaching processes.

PCTWORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : C22B 15/00, 3/18	A1	(11) International Publication Number: WO 98/39491 (43) International Publication Date: 11 September 1998 (11.09.98)
(21) International Application Number: PCT/GB97/00585 (22) International Filing Date: 3 March 1997 (03.03.97) (71)(72) Applicant and Inventor: PINCHES, Anthony [GB/ZA]; 253 Landi Street, Garsfontein, Pretoria (ZA). (72) Inventors; and (75) Inventors/Applicants (for US only): MYBURGH, Peter, John [ZA/ZA]; 10 Anne Manor, Princess Avenue Windsor, Johannesburg (ZA). VAN DER MERWE, Charmaine [ZA/ZA]; 1399 Helderberg Street, Bergbron, Roodepoort (ZA). (74) Agent: MALLALIEU, Catherine, Louise; D. Young & Co., 21 New Fetter Lane, London EC4A 1DA (GB).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ARIPO patent (GH, KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i>
(54) Title: A PROCESS FOR THE LEACHING OF CHALCOPYRITE (57) Abstract A process is provided for the leaching of copper from chalcopyrite using ferric sulphate in which acceptable rates of leaching are achieved by controlling the surface potential of the chalcopyrite to an empirically determined "window" within the broad range of 350 to 450 mV. The most effective process conditions involve the selection of the said surface potential; the leach temperature; the pH of the leach solution; and the fineness of the grind of the chalcopyrite. The invention may be applied to both tank leaching and heap leaching processes.		

