

Search history

Search 1: TAC=(((gold AND silver) W4 extraction) near (system* OR device* OR apparatus OR assemb*)) and PD<20160822 (Results 0)

Search 2: FT=(((gold AND silver) W4 extract*) near (system* OR device* OR apparatus OR assemb*)) and PD<20160822 (Results 17)

Search 3: TAC=(((precious WF2 metal*) OR gold OR silver) W4 extraction) near (system* OR device* OR apparatus OR assemb*)) and PD<20160822 (Results 76)

Search 4: FT=(((precious WF2 metal*) OR gold OR silver) W4 extraction) near (system* OR device* OR apparatus OR assemb*)) and PD<20160822 (Results 105)

Search 5: 4 AND (FT = cyanide) (Results 29)

Search 6: 4 AND (FT = cyanid*) (Results 32)

Search 7: 6 AND (FT = tank*) (Results 20)

Title: BIOCATALYZED LEACHING OF PRECIOUS METAL VALUES

Abstract: Source: US5449397A A biohydrometallurgical apparatus and method for extracting precious metals, including gold and silver, from oxidized ore by means of leaching with a neutral bisulfide solution instead of cyanide, thiourea, thiosulfate, or other conventional lixivants is disclosed. In a preferred embodiment, a first process step of conventional bio-oxidation of ore particles is accomplished to free precious metals dispersed or occluded within the ore. A portion of the acidic, base-metal sulfate leach solution produced by bio-oxidation is introduced to an anaerobic reactor. In a heap leach embodiment of the process, the anaerobic reactor is a side-stream reactor. In an alternative slurry (e.g., vat) leaching embodiment, the anaerobic process may occur on-line. A preferably non-toxic electron donor, such as acetate or methanol (which does not bind effectively to activated carbon), is added to the anaerobic reactor to enrich within it a mixed culture of sulfate-reducing bacteria. The anaerobic reactor may be operated in a pH-stat mode by adding sufficient acidic sulfate solution to maintain a neutral pH in the reactor. In a second process step, the oxidized ore (possibly covered and submerged to exclude oxygen) is leached by recirculating the neutral bisulfide lixiviant saturated with H₂S through it in a leaching reactor. Precious metal values are recovered from the pregnant bisulfide solution by contact with activated carbon or other conventional techniques.

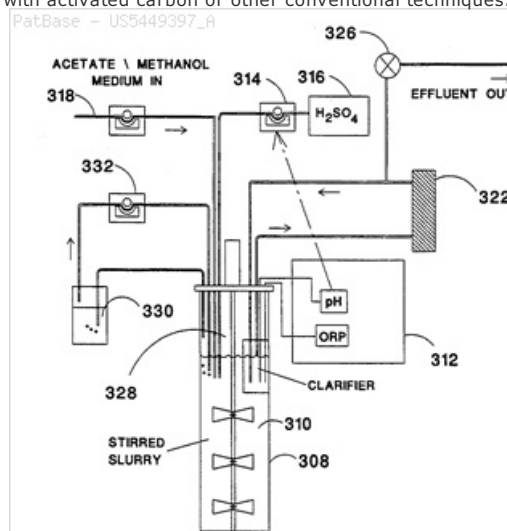
Classifications:**International (IPC 8-9):** C22B11/00 C22B3/02 C22B3/04

C22B3/18 (Advanced/Invention);

C22B11/00 C22B3/00 (Core/Invention)

International (IPC 1-7): C22B C22B11/00 C22B3/02 C22B3/04

C22B3/18

CPC: Y10S423/17 Y02P10/234 C22B3/18 C22B11/04**European:** C22B11/04 C22B3/18**US:** 266/101 423/DIG.17 75/712 75/744**Family:**

Publication number	Publication date	Application number	Application date
AU199534899 A1	19960119	AU19950034899	19950626
AU700356 B2	19990107	AU19950034899	19950626
CA2194349 AA	19970103	CA19952194349	19950626
CA2194349 C	20060530	CA19952194349	19950626
US5449397 A	19950912	US19940265322	19940624
US5672194 A	19970930	US19950436726	19950508
WO9600308 A2	19960104	WO1995US09199	19950626
WO9600308 A3	19960215	WO1995US09199	19950626
ZA9505224 A	19960531	ZA19950005224	19950623

Priority:

US19940265322 19940624

US19950436726 19950508

WO1995US09199 19950626

Probable Assignee: YELLOWSTONE ENVIRONMENTAL SCIENCE INC**Assignee(s):** (std): DARSOW TAMARA ; FOGELSONG MACGREGOR L ; FRANK M STEWART ; HUNTER ROBERT M ; MACGREGOR L FOGELSONG ; YELLOWSTONE ENVIRONMENT SCIENC ; STEWART FRANK M ; YELLOWSTONE ENVIRONMENTAL SCIE ; TAMARA DARSOW ; YES TECHNOLOGIES**Assignee(s):** YELLOWSTONE ENVIRONMENT SCIENCE INC ; NATIONAL SCIENCE FOU ; YELLOWSTONE ENVIRONMENTAL SCIENCE INC ; NATIONAL SCIENCE FOUNDATION ; ROBERT M HUNTER**Inventor(s):** (std): DARSOW TAMARA ; FOGELSONG MACGREGOR L ; HUNTER ROBERT M ; STEWART FRANK M**Inventor(s):** TAMARA DARSOW ; MACGREGOR L FOGELSONG ; ROBERT M HUNTER ; FRANK M STEWART**Agent(s):** DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; MBM INTELLECTUAL PROPERTY LAW LLP**Designated states:** AM AT AU BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK EE ES FI FR GA GB GE GN GR HU IE IT JP KE KG KP KR KZ LK LR LT LU LV MC MD MG ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SI SK SN SZ TD TG TJ TT UA UG US UZ VN

Title: GOLD EXTRACTION FROM ORES WITH CHEMICALS REGENERATION.

Abstract: Methods for extracting gold from ores are disclosed. A solution of iodine and potassium iodide (102) dissolves the gold from the ore in a reaction pond (104). A filter unit (120) is positioned between the solution supply and the pond. Liquid solution product is withdrawn by pump (162) and includes unreacted KI3 and KI and a dissolved gold iodide complex. The liquid product passes to a heat exchanger (166) and then to a crystallization tank (170) which uses an evaporative cooling unit (171) to lower the temperature in the tank. In the tank a precipitate Au.KI3 (180) forms which is removed by a vacuum filter (182). The precipitate is combined with water until it is dissolved and as a result AuI crystals (202) are formed which are then separated from the remaining solution (204) which is dissolved KI and I2.

Classifications:

International (IPC 8-9): B65D69/00 B65D71/00 C01G7/00

C22C11/06 (Advanced/Invention);

B65D69/00 B65D71/00 C01G7/00 C22C11/00 (Core/Invention);

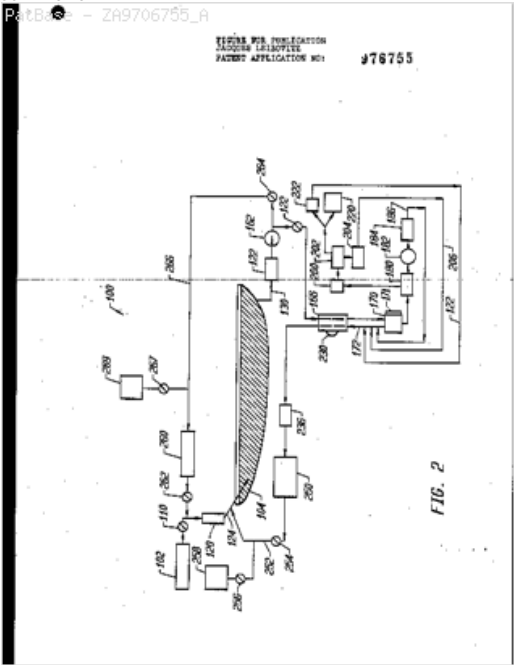
C22B (Subclass/Invention)

International (IPC 1-7): B65D69/00 B65D71/00 C01G7/00 C22B

C22C11/06

CPC: C22B11/04

European: C22B11/04



Family:

Publication number	Publication date	Application number	Application date
WO9805569 A1	19980212	WO1997US12413	19970716
ZA9706755 A	19980211	ZA19970006755	19970729

Priority:

US19960691594 19960802

Probable Assignee: LEIBOVITZ JACQUES

Assignee(s): (std): JACQUES LEIBOVITZ ; LEIBOVITZ JACQUES

Inventor(s): (std): LEIBOVITZ JACQUES

Inventor(s): JACQUES LEIBOVITZ

Designated states: AL AM AT AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CZ DE DK EE ES FI FR GA GB GE GH GN GR HU IE IL IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SN SZ TD TG TJ TM TR TT UA UG UZ VN ZW

Title: A PROCESS FOR GOLD EXTRACTION

Abstract: A process for the extraction of gold and/or silver from gold and/or silver bearing ore particles or concentrates, said process including the stages of: A. filling a reaction vessel with said ore particles or concentrates, and B. circulating a gold and/or silver leaching solution through the reaction vessel such that a fluidised bed of said ore particles or concentrates is achieved.

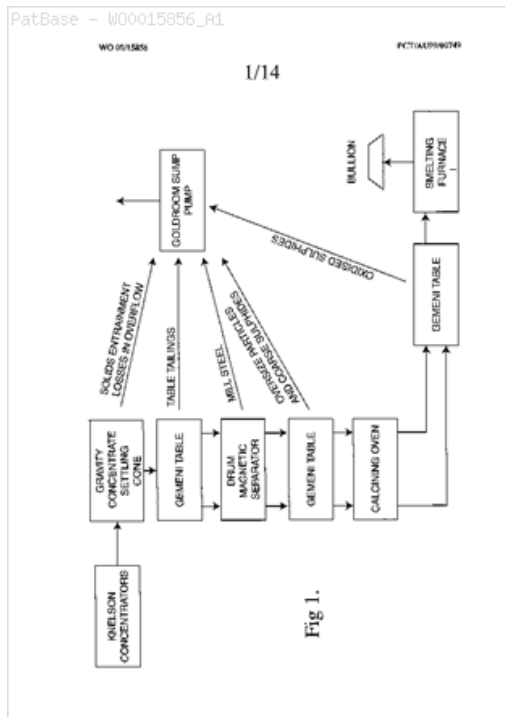
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C22B3/00 C22B3/02 C22B3/04 C22B3/06
C22B3/12 (Advanced/Invention);
C22B11/00 C22B3/00 (Core/Invention)

International (IPC 1-7): C22B11/00 C22B11/08 C22B11/12
C22B3/00 C22B3/02 C22B3/04 C22B3/06 C22B3/12

CPC: Y02P10/234 C22B3/02 C22B11/04

European: C22B11/04 C22B3/02



Family:

Publication number	Publication date	Application number	Application date
AU199947471 A1	20000323	AU19990047471	19990909
AU199947471 A5	20000323	AU19990047471	19990909
AU199960702 A1	20000403	AU19990060702	19990909
AU199960702 A5	20000403	AU19990060702	19990909
AU595898 A0	19981008	AU1998PP05958	19980916
WO0015856 A1	20000323	WO1999AU00749	19990909

Priority:

AU1998PP05958 19980916 AU19990047471 19990909 WO1999AU00749 19990909
AU19990060702 19990909

Probable Assignee: ACACIA RESOURCES LIMITED

Assignee(s): (std): ACACIA RESOURCES LIMITED ; ACACIA RESOURCES LTD ; LETHLEAN WILLIAM RONALD

Inventor(s): (std): LETHLEAN WILLIAM RONALD

Inventor(s): WILLIAM RONALD LETHLEAN

Agent(s): WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD

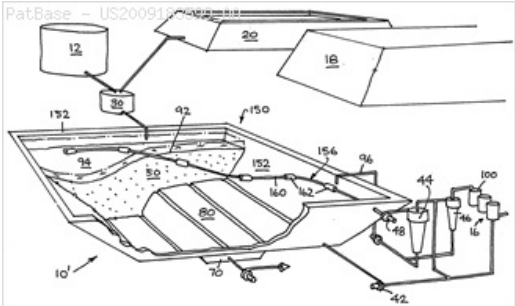
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Title: MINERAL EXTRACTION SYSTEM AND PROCESS

Abstract: Source: US2009183599A A trench leaching system including a **tank** containing a charge of ore flooded with a liquid solvent up to the level of a gutter. A pump recirculates the solvent upwardly through the charge of ore via a sparging array for dissolving minerals which are reclaimed through a series of cyclones and stripped out of the pregnant solvent by a carbon column. The rate and pressure of the solvent flowing through the sparging array upwardly though the ore are kept below the amount that would fluidise the ore and at an amount that produces channels which follow random paths that vary with time through the ore, wherein particles of ore in the channels are agitated by the solvent and wherein particles of ore outside the channels are maintained substantially static and in contact with the liquid solvent. Such a system can process low grade ore at low operating and capital costs.

Classifications:

International (IPC 8-9): B03B5/00 B22F9/20 C22B11/08 C22B3/04 (Advanced/Invention); B03B5/00 B22F9/16 C22B11/00 C22B3/00 (Core/Invention); C22B (Subclass/Invention)
CPC: Y02P10/234 C22B11/04 C22B3/02 C22B11/08
European: C22B11/04 C22B11/08 C22B3/02
US: 266/114 75/370



Family:

Publication number	Publication date	Application number	Application date
AU2007225020 AA	20070920	AU20070225020	20070316
BRPI0709287 A2	20110705	BR2007PI09287	20070316
CA2645098 AA	20080909	CA20072645098	20070316
CN101432452 A	20090513	CN200780015269	20070316
US2009183599 AA	20090723	US20070282970	20070316
WO07104106 A1	20070920	WO2007AU00320	20070316
ZA200808795 A	20090930	ZA20080008795	20081015

Priority:

AU20060901357 20060316 AU20070225020 20070316 WO2007AU00320 20070316

Probable Assignee: DEVERE MINING TECHNOLOGIES LTD

Assignee(s): (std): DEVERE MINING TECHNOLOGIES LTD ; GIRAUDO CLINTON JOHN ; MAWBY AARON BRUCE ; SADLEIR NICHOLAS GEOFFREY DEVE

Assignee(s): DEVERE MINING TECHNOLOGIES LIMITED ; SADLEIR KIMBERLEY VERE DECEASED ; SADLEIR NICHOLAS GEOFFREY DEVERE

Inventor(s): (std): DEVERE NICHOLAS GEOFFREY ; GIRAUDO CLINTON JOHN ; JOHN GIRAUDO CLINTON ; MAWBY AARON BRUCE ; BRUCE MAWBY AARON ; SADLEIR KIMBERLEY VERE ; SADLEIR NICHOLAS GEOFFREY DE V ; SADLEIR NICHOLAS GEOFFREY DEVERE ; VERE SADLEIR KIMBERLEY

Inventor(s): SADLEIR NICHOLAS GEOFFREY DE VERE ; AARON BRUCE MAWBY ; SADLEIR KIMBERLEY VERE DECEASED ; CLINTON JOHN GIRAUDO ; NICHOLAS GEOFFREY DEVERE SADLEIR

Agent(s): DEVERE MINING TECHNOLOGIES LTD; BORDEN LADNER GERVAIS LLP; BROOKS KUSHMAN PC

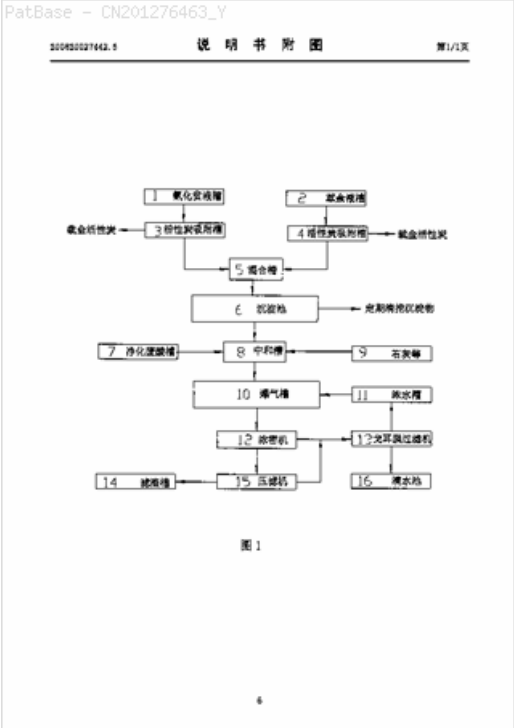
Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: Sewage treatment **system extracting gold** by calcination cyanation

Abstract: Source: CN201276463Y The utility model relates to a **gold extraction** sewage processing **system** with a calcinations **cyanide** process, belonging to the technical field of hydrometallurgy. The **gold extraction** sewage processing **system** with a calcinations **cyanide** process is characterized in that: the system comprises activated carbon adsorption **tanks** (3, 4) which are respectively communicated with a **cyaniding** barren solution **tank** (1) and a raffinate **tank** (2), a mixing **tank** (5), a sedimentation **tank** (6), a neutralizing **tank** (8), an aeration **tank** (10), a thickener (12) and a plate and frame filter press (15) which are connected in sequence; filter cakes of the plate and frame filter press (15) is discharged in a filter residue **tank** (14), and the filtering liquid output ends of the thickener (12) and the plate and frame filter press (15) are connected with a ge-eardrum filter (13), and the output end of the ge-eardrum filter (13) is connected with the aeration **tank** (10) by a concentrated water **tank** (11), and the other output end thereof is communicated with a clean water **tank** (16). The system has the effect that most of equipment adopts concrete **tanks**, and the investment is less; the air aeration **tank** is adopted, and the operating cost is low; the activated carbon adsorption **tanks**, the thickener and the ge-eardrum filter are adopted, and the efficiency on removing **cyanide** and heavy metal ions is high, and the treating water quality is good.

Classifications:

International (IPC 8-9): C02F9/04 (Advanced/Invention);
C02F1/28 C02F1/52 C02F1/66 (Advanced/Non-invention);
C02F9/00 (Core/Invention)



Family:

Publication number	Publication date	Application number	Application date
CN201276463 Y	20090722	CN200820027442U	20080904

Priority:

CN200820027442U 20080904

Probable Assignee: SHANDONG GUODA GOLDE CO LTD
Assignee(s): (std): SHANDONG GUODA GOLDE CO LTD
Assignee(s): SHANDONG GUODA GOLDE CO
Inventor(s): (std): SHOUMING LU ; SHUJIAN YAO ; YONGXIANG XU
Inventor(s): LU SHOUMING ; XU YONGXIANG ; YAO SHUJIAN

Title: METHOD FOR PROCESSING PRECIOUS METAL SOURCE MATERIALS

Abstract: Source: US2012067169A A method is disclosed for recovering precious metals from source materials containing precious metals which involves leaching the source material in aqueous reducing liquor to provide a treated solid residue and processing the treated residue to recover precious metals.

Classifications:

International (ipc 8-9): C22B11/00 C22B11/02 C22B11/08 C22B3/00 C22B3/04 C22B3/06 C22B3/12 C22B3/16 C22B4/00 C22B5/00 C22B9/10 (Advanced/Invention); C22B (Subclass/Invention)

CPC: C22B1/005 C22B7/002 C22B7/006 C22B9/00 C22B11/021 Y02P10/214 Y02P10/234 C22B11/04 C22B3/10 C22B3/20 C22B9/10 C22B11/02 C22B11/06 C22B11/08

European: C22B1/00D C22B11/02 C22B11/02R C22B11/04 C22B11/06 C22B11/08 C22B3/10 C22B3/20 C22B7/00B2 C22B7/00D C22B9/00 C22B9/10 M22B9/10

US: 75/10.62 75/10.620P 75/392 75/392S 75/419 75/419S 75/423 75/423P 75/637 75/637P 75/710 75/710S 75/714 75/714S 75/744 75/744P 75/744S

Family:

Publication number	Publication date	Application number	Application date
AU2010239083 AA	20101028	AU20100239083	20100423
AU2010239156 AA	20101028	AU20100239156	20100423
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AU2010268687 AA	20110106	AU20100268687	20100701
AU2012100072 AD	20120223	AU20120100072	20120123
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AU2012100073 AD	20120223	AU20120100073	20120123
AU2012100073 BD	20120614	AU20120100073	20120123
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CA2760354 AA	20101028	CA20102760354	20100423
CA2766812 AA	20110106	CA20102766812	20100701
CN102459659 A	20120516	CN201080026911	20100423
CN102459660 A	20120516	CN201080027733	20100423
CN102459661 A	20120516	CN201080026267	20100423
CN102549177 A	20120704	CN201080029778	20100701
US2012067169 AA	20120322	US20100266025	20100423
US2012067170 AA	20120322	US20100266001	20100423
US2012090433 AA	20120419	US20100266037	20100423
US2012144959 AA	20120614	US20100381228	20100701
WO10121317 A1	20101028	WO2010AU00461	20100423
WO10121318 A1	20101028	WO2010AU00462	20100423
WO10121329 A1	20101028	WO2010AU00473	20100423
WO11000051 A1	20110106	WO2010AU00841	20100701
WO11130790 A1	20111027	WO2011AU00454	20110421
ZA201107780 A	20120725	ZA20110007780	20111024
ZA201107781 A	20120725	ZA20110007781	20111024
ZA201107782 A	20120725	ZA20110007782	20111024
ZA201108998 A	20120829	ZA20110008998	20111207

Priority:

AU20100239083	20100423	AU20100239156	20100423	AU20100239157	20100423
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US20090244309P	20090921	US20100327176P	20100423	US20100266025	20100423
US20100266001	20100423	US20100266037	20100423	US20100360557P	20100701
WO2010AU00473	20100423	WO2010AU00462	20100423	WO2010AU00461	20100423
WO2010AU00841	20100701	US20100381228	20100701		

Probable Assignee: PRECIOUS METALS RECOVERY PTY LTD

Assignee(s): (std): BUTLER DEAN R ; BUTLER DEAN ROBERT ; PRECIOUS METALS RECOVERY PTY L ; PRECIOUS METALS RECOVERY PTY LTD

Inventor(s): (std): BUTLER DEAN R ; BUTLER DEAN ROBERT ; ROBERT BUTLER DEAN

Agent(s): PHILLIPS ORMONDE FITZPATRICK; SIM AND MCBURNEY

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: PROCEDE ET SYSTEME DE TRAITEMENT DESTINE A EXTRAIRE DE L'OR CONTENU DANS UN MINERAL AURIFERE

Abstract: The process comprises placing ore (12) having a liquid phase (12L) and a solid phase and then forming a prepared ore (14) from ore, placing an etching solution (16) comprising sodium thiosulfate, cupri-ethylene-diamine or sodium thiosulfate, copper sulfate and nickel sulfate and polyethylene amine, mixing the prepared ore with the etching solution in an etching container to form an ore pulp (18) so that, during an etching phase, that etching solution dissolves the gold contained in the prepared ore, and capturing solubilized gold during the etching phase by receiving unit. The process comprises placing ore (12) having a liquid phase (12L) and a solid phase and then forming a prepared ore (14) from ore, placing an etching solution (16) comprising sodium thiosulfate, cupri-ethylene-diamine or sodium thiosulfate, copper sulfate and nickel sulfate and polyethylene amine, mixing the prepared ore with the etching solution in an etching container to form an ore pulp (18) so that, during an etching phase, that etching solution dissolves the gold contained in the prepared ore, capturing solubilized gold during the etching phase by receiving unit and constituting a weak solution (28) devoid of gold, retaining a portion to be preserved of the weak solution and reusing the part to be preserved of the weak solution to form the etching solution, and purging a part to be excluded from the weak solution towards a neutralization unit to neutralize the adverse effects of the part to be excluded from the weak solution on the environment. The formation of the prepared ore comprises removing a part of the liquid phase of the ore so that the prepared ore has a liquid phase and a solid phase in predetermined proportions defining a flow of introduction of liquid phase of prepared ore to mix with the etching solution, and removing a portion of the liquid phase of the ore to obtain a rate of introduction of liquid phase of prepared ore in the ore pulp such that the liquid phase of prepared ore is 3-20 percent of the total weight of the prepared ore. The part to be excluded of the weak solution is purged at a purging rate equivalent to the rate of introduction of the liquid phase of prepared ore to be mixed with the etching solution. The receiving unit fixing the solubilized gold comprises active carbon and ion exchange resins or metal powders. A very low amount of **cyanide** is used to pass the solubilized gold in the aurothiosulfate form to aurocyanide form before the solubilized gold is captured by the activated carbon. The ore pulp is transformed, during the etching phase, into an etched pulp (20) having a solid phase and a liquid phase also called rich solution in which solubilized gold is present and in which the solubilized gold passes the aurothiosulfate form to the aurocyanide form. During a separation operation, the solid phase of the etched pulp is separated from rich solution to recover the rich solution and the solid phase of the etched pulp weak in gold is isolated to recover the liquid phase of the etched pulp low in gold corresponding to the weak solution. During a phase for transformation into aurocyanide, very small quantity of **cyanide** of 5-20 mg of **cyanide** per liter of rich solution is introduced into that rich solution so that the gold dissolved in the rich solution passes from the aurothiosulfate to the aurocyanide form. During a phase of recovery of gold, the activated carbon and the ion exchange resins or metal powders are used to capture the solubilized gold in the aurocyanide form. The prepared ore and the etching solution are mixed with the activated carbon, ion exchange resins and the very low amount of **cyanide**. The prepared ore is placed on an etching container forming a sealed area, and the etching solution sprays the prepared ore. During the attack phase, the etching solution etches the prepared ore by percolation to obtain a rich solution in which the solubilized gold is present. The prepared ore is placed on an etching container forming a sealed area and the etching solution prepared this mineral waters. The step of removing a portion of the liquid phase of the ore is operated by a module consisting of a drying tube, spin-dryer, centrifuge, pressure belt filter, filter press, horizontal belt filter or forced or natural evaporation module. The part to be preserved of the weak solution is discharged into a storage container of the etching solution. The storage container of the etching solution is connected to a preparation container of a concentrated etching solution. The etching container is connected to the preparation container and is fed in concentrated etching solution. The process further comprises carrying out an electrolysis of the part to excluded of the weak solution so as to recover the copper contained in that part to be excluded of the weak solution and then meeting the standards of copper material discharge in environment. The part to be excluded of the weak solution is neutralized by neutralization agents to recover copper and limit the effects of the part to be excluded of the weak solution on the environment and by total or partial evaporation of its liquid phase then recovery of copper and neutralization of the residual part. An independent claim is included for a **system** for **extraction** of **gold** contained in the ore by the treatment of the gold ore.

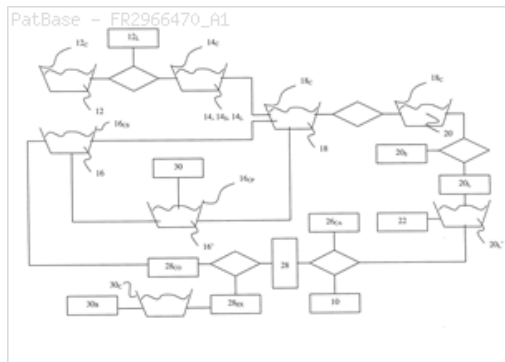
Classifications:

International (IPC 8-9): C22B11/00 C22B3/12

C22B3/42 (Advanced/Invention)

CPC: Y02P10/234 C22B11/04 C22B3/02 C22B3/24 C22B11/08

European: C22B11/04 C22B11/08 C22B3/02 C22B3/24



Title: EXTRACTION OF GOLD FROM FINE CARBON RESIDUE

Abstract: Source: US2014298954A Recovering gold from gold-loaded fine carbon by application of thermo-kinetic chemical activation regime at a low temperature, while preventing vitrification of impurities found in the gold-loaded fine carbon.

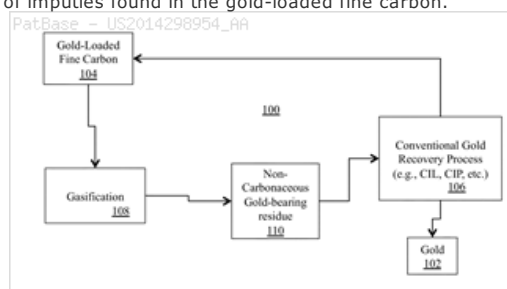
Classifications:

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C22B3/20 (Advanced/Invention)

CPC: C22B11/044 C22B3/0098 C22B11/023 C22B3/24 Y02P10/214 Y02P10/234

US: 1/1 75/392 75/423 75/711 75/744



Family:

Publication number	Publication date	Application number	Application date
AU2014251272 AA	20141016	AU20140251272	20140321
CA2907861 AA	20150923	CA20142907861	20140321
EA201500856 A1	20160729	EA20150000856	20140321
EP2984193 A1	20160217	EP20140724227	20140321
MX2015013666 A1	20160218	MX20150013666	20140321
US2014298954 AA	20141009	US20130858415	20130408
US9062358 BB	20150623	US20130858415	20130408
WO14168749 A1	20141016	WO2014US31518	20140321

Priority:

US20130858415 20130408 WO2014US31518 20140321

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Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

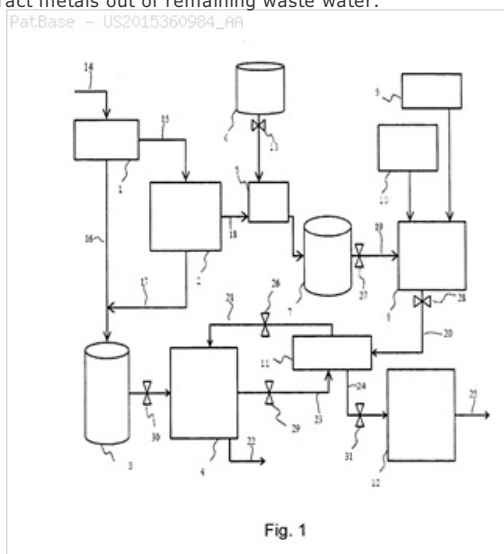
Title: PROCESSING AND APPLICATION OF A PURIFICATION **SYSTEM** FOR **GOLD** MINING, **EXTRACTION** OF MINERALS AND GROWTH OF ALGAE BIOMASS

Abstract: Source: US2015360984A The present disclosure describes a process for using saline water, and saline reject water produced in water purification, to use for gold mining production, and growing and harvesting algae. The disclosure also describes a method for growing and harvesting algae utilizing saline water as growth medium for recycling waste water to extract the remaining metals out of waste water. The harvested algae may be used in various applications including but not limited to water purification for gold mining production and to extract metals out of remaining waste water.

Classifications:

International (IPC 8-9): C02F1/04 C02F1/44 C02F1/469 C02F3/32 C02F9/00 C12N1/12 C12P7/64 C22B3/00 C22B3/02 C22B3/18 C22B3/24 (Advanced/Invention); C02F1/04 C02F1/44 C02F1/461 C02F1/469 C02F1/66 C02F101/20 C02F101/32 C02F103/10 (Advanced/Non-invention)
CPC: C12P7/64 C22B11/04 C22B3/02 C22B3/24 C02F2101/20 C02F1/461 C02F1/66 C02F9/00 C02F2101/32 C02F2103/10 C12N1/12 Y02P10/234 Y02W10/37 C22B3/18 C02F1/041 C02F1/441 C02F1/4693 C02F3/322

US: 1/1 435/134 435/294.1 75/711



Family:

Publication number	Publication date	Application number	Application date
US2015360984 AA	20151217	US20140303312	20140612
US2016376680 AA	20161229	US20160264016	20160913
US9446973 BB	20160920	US20140303312	20140612

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