



Australian Government
IP Australia

Search Information Statement (SIS)

**Application
Number**

PCT/AU2019/051319

A. Search Details

Additional Members of the Search Team (if convened):	A. Dias-Abey, K. Shamim	Earlier Search Results (if available)	
		Current SIS Completion Date	27 February 2020

B. Search Strategy

(1) Applicant/Inventor search

Database: Google Patents, Espacenet & internal databases managed by IP Australia

Applicant: CLEGG, Robert, Louis

Inventors: CLEGG, Robert, Louis; VAN DYK, Deon

Relevant documents viewed.

(2) ESPACENET AND GOOGLE Advanced Patent search with keywords: reactor, liquid, slurry, gas, zone, outlet, combine and similar terms.

(3) Search in EPOQUE - PATENW

Results

PATENW	SS	Query
	Status	
1	76.990	/C/IC C22B3/0001/LOW OR C22B3/0004/LOW OR C22B3/02 OR C22B3/04/LOW OR C22B3/06/LOW OR C22B3/18 OR C22B3/20/LOW OR C22B11/04/LOW OR C22B11/06 OR C22B11/08 OR C22B15/0004 OR C22B17/04 OR C22B19/20/LOW OR C22B23/04/LOW OR C22B25/04 OR Y02P10/234/LOW
> 2	81.500	*XT {..FAMEX SS 1 FROM PATENW}
> 3	6.081	2 AND (IMPELLER? OR BLADE? OR PADDLE? OR VANE? OR PROPELLER? OR TURBINE? OR RUSHTON)
> 4	314	3 AND (15UG (GAS+ OR +AIR OR OXYGEN OR "O2" OR "CO2" OR (CARBON D DIOXIDE)), (EXIT? OR OUTLET? OR EGRESS OR ENTRAIN+ OR VENT+ OR EXHAUST+), (LIQUID? OR FLUID? OR SLURR[Y,I]+OR MUD? OR PULP?))
> 5	173	4 AND ((VESSEL? OR REACTOR? OR COLUMN? OR TANK? OR TOWER? OR AUTOCLAVE? OR KETTLE? OR BOILER? OR CSTR OR "BC" OR "ALR") 7D (PLURAL+ OR MULTIPLE? OR SERIES OR CASCADE+ OR TWO OR THREE OR FOUR))
> 6	64	3 AND (20UG (GAS+ OR +AIR OR OXYGEN OR "O2" OR "CO2" OR (CARBON D DIOXIDE)), (EXIT? OR OUTLET? OR EGRESS OR ENTRAIN+ OR VENT+ OR EXHAUST+), (LIQUID? OR FLUID? OR SLURR[Y,I]+OR MUD? OR PULP?), (+CONNECT+ OR LINK+ OR COMMUNICAT+ OR JOIN+ OR COMBIN+ OR BRIDG+))
> 7	38	6 NOT 5
> 8	778	2 AND (9UG (+REACTOR? OR AUTOCLAVE? OR CSTR OR (BUBBLE_COLUMN) OR (AIR_LIFT) OR "BC" OR "ALR"), (SLURR[Y,I]+OR MUD? OR PULP?))
> 9	41	8 AND (7UG (GAS+ OR +AIR OR OXYGEN OR "O2" OR "CO2" OR (CARBON D DIOXIDE)), (SEPARATE+ OR DISENGAGE+ OR CLARIFICAT+))
> 10	9	8 AND (20UG (GAS+ OR +AIR OR OXYGEN OR "O2" OR "CO2" OR (CARBON D

DIOXIDE)), (EXIT? OR OUTLET? OR EGRESS OR ENTRAIN+ OR VENT+ OR EXHAUST+), (LIQUID? OR FLUID? OR SLURR[Y,I]+OR MUD? OR PULP?), (+CONNECT+ OR LINK+ OR COMMUNICAT+ OR JOIN+ OR COMBIN+ OR BRIDG+))
 > 11 5 10 NOT 9
 12 46.906 /C/IC B01J3/02 OR B01J3/04/LOW OR B01J8/005/LOW OR B01J8/08/LOW OR B01J8/20/LOW OR B01J2219/00493 OR B01J2219/00495 OR B01J2219/00768
 > 13 57.938 *XT {...FAMEX SS 12 FROM PATENW}
 > 14 57.305 13 NOT 2
 > 15 91 14 AND (9UG (+REACTOR? OR AUTOCLAVE? OR CSTR OR (BUBBLE_COLUMN) OR (AIR_LIFT) OR "BC" OR "ALR"), (SLURR[Y,I]+OR MUD? OR PULP?))
 > 16 32 15 AND (7UG (GAS+ OR +AIR OR OXYGEN OR "O2" OR "CO2" OR (CARBON D DIOXIDE)), (SEPARATE+ OR DISENGAGE+ OR CLARIFICAT+))
 > 17 9 15 AND (20UG (GAS+ OR +AIR OR OXYGEN OR "O2" OR "CO2" OR (CARBON D DIOXIDE)), (EXIT? OR OUTLET? OR EGRESS OR ENTRAIN+ OR VENT+ OR EXHAUST+), (LIQUID? OR FLUID? OR SLURR[Y,I]+OR MUD? OR PULP?), (+CONNECT+ OR LINK+ OR COMMUNICAT+ OR JOIN+ OR COMBIN+ OR BRIDG+))
 > 18 36 16 OR 17
 > 19 36 18 NOT (5 OR 7 OR 9 OR 11)

Results of search statements 5, 7, 9, 11, 18 and 19 viewed.

PATENW 1 62248 7UG (REACTOR? OR AUTOCLAVE? OR EXTRACT+ OR KETTLE? OR CSTR OR "BC" OR "ALR"), ((GAS 2D LIQUID) OR (THREE D PHASE))
 2 112554 *XT {...FAMEX SS 1 FROM PATENW}
 3 8601 2 AND (12UG (LIQUID? OR FLUID? OR SLURR[I,Y]+ OR SLUDG+), (INLET? OR ENTRY OR INGRESS), (EXIT? OR OUTLET?? OR EGRESS))
 4 996 3 AND (9UG (GAS+ OR +AIR OR OXYGEN OR "O2" OR "CO2" OR (CARBON D DIOXIDE)), (ZONE? OR SPACE? OR VOLUME OR REGION? OR FREEBOARD+), (EXIT? OR OUTLET?? OR EGRESS OR VENT+ OR EXHAUST+))
 5 239 4 AND (10UG (LIQUID? OR FLUID? OR SLURR[Y,I]+ OR SLUDGE?), (+CONNECT+ OR LINK+ OR COMMUNICAT+ OR JOIN+ OR COMBIN+), (GAS+ OR +AIR OR OXYGEN OR "O2" OR "CO2" OR (CARBON D DIOXIDE)), (EXIT? OR OUTLET? OR EGRESS))
 6 109497 7UG (REACTION+ OR PROCESS+), (VESSEL? OR CHAMBER?), (LIQUID? OR FLUID? OR (THREE D PHASE) OR SLURR[I,Y]+)
 7 199637 *XT {...FAMEX SS 6 FROM PATENW}
 8 190820 7 NOT 2
 9 14928 8 AND (9UG (LIQUID? OR FLUID? OR SLURR[I,Y]+ SLUDG+), (INLET? OR ENTRY OR INGRESS), (EXIT? OR OUTLET?? OR EGRESS))
 10 846 9 AND (9UG (GAS+ OR +AIR OR OXYGEN OR "O2" OR "CO2" OR (CARBON D DIOXIDE)), (ZONE? OR SPACE? OR VOLUME OR REGION? OR FREEBOARD+), (EXIT? OR OUTLET?? OR EGRESS OR VENT+ OR EXHAUST+))
 11 114 10 AND (10UG (LIQUID? OR FLUID? OR SLURR[Y,I]+ OR SLUDGE?), (+CONNECT+ OR LINK+ OR COMMUNICAT+ OR JOIN+ OR COMBIN+), (GAS+ OR +AIR OR OXYGEN OR "O2" OR "CO2" OR (CARBON D DIOXIDE)), (EXIT? OR OUTLET? OR EGRESS))
 12 3735 /C/IC C01F7/06/LOW
 13 4272 *XT {...FAMEX SS 12 FROM PATENW}
 14 4159 13 NOT (2 OR 7)
 15 19 14 AND (12UG (LIQUID? OR FLUID? OR SLURR[I,Y]+ OR SLUDG+), (INLET? OR ENTRY OR INGRESS), (EXIT? OR OUTLET?? OR EGRESS))
 16 28326 /C/IC C02F11/02/LOW OR C02F3/LOW
 17 32614 *XT {...FAMEX SS 16 FROM PATENW}
 18 31151 17 NOT (2 OR 7 OR 13)
 19 789 18 AND (12UG (LIQUID? OR FLUID? OR SLURR[I,Y]+ OR SLUDG+), (INLET? OR ENTRY OR INGRESS), (EXIT? OR OUTLET?? OR EGRESS))
 20 35 19 AND (9UG (GAS+ OR +AIR OR OXYGEN OR "O2" OR "CO2" OR (CARBON D DIOXIDE)), (ZONE? OR SPACE? OR VOLUME OR REGION? OR FREEBOARD+), (EXIT? OR OUTLET?? OR EGRESS OR VENT+ OR EXHAUST+))
 21 52519 /C/IC B01D11/LOW
 22 70321 *XT {...FAMEX SS 21 FROM PATENW}
 23 66382 22 NOT (2 OR 7 OR 17)
 24 3285 23 AND (10UG (LIQUID? OR FLUID? OR SLURR[I,Y]+ OR SLUDG+), (INLET? OR ENTRY OR INGRESS), (EXIT? OR OUTLET?? OR EGRESS))

25 61 24 AND (10UG (GAS+ OR +AIR OR OXYGEN OR "O2" OR "CO2" OR (CARBON D
DIOXIDE)), (ZONE? OR SPACE? OR VOLUME OR REGION? OR FREEBOARD+), (EXIT? OR
OUTLET?? OR EGRESS OR VENT+ OR EXHAUST+))

Results of search statements 5, 11, 15, 20 and 25 viewed.