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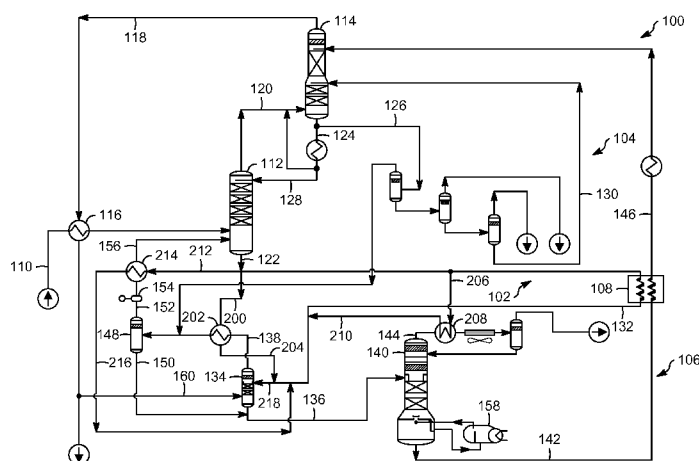
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(54) Title: HEAT INTEGRATION FOR HOT SOLVENT STRIPPING LOOP IN AN ACID GAS REMOVAL PROCESS



(57) Abstract: Systems and processes utilize one or more methods of providing overhead waste process heat to increase the feed temperature of the hot solvent stripping regeneration loop in an acid gas removal process. A heated rich solvent stream can be the primary feed for the hot solvent stripping regeneration loop, and one or more slip streams can be heated and then combined with the heated rich solvent stream to form a combined rich solvent stream prior to further processing in downstream units to remove acid gas from the solvent. A first slip stream can be heated in a stripper gas heat exchanger by heat exchange with a stripped gas stream. A second slip stream can be heated in a regenerator exchanger by heat exchange with an acid gas stream. A third slip stream can be heated in a recycle gas exchanger by heat exchange with a compressed recycle gas stream.



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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

B01D 53/75; B01D 19/00; B01D 50/00; B01D 53/14; C01B 17/16

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords:acid, removal, absorber, solvent

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2008/0184887 A1 (MAK JOHN) 07 August 2008 See abstract, figures 2-5, paragraphs [0029] to [0038]	1-10
A	US 2006/0032377 A1 (SATISH REDDY et al.) 16 February 2006 See abstract, figures 1-2, paragraphs [0024] to [0027] and [0032]	1-10
A	US 2005/0172807 A1 (MAK JOHN) 11 August 2005 See abstract, figure 2, paragraphs [0023], [0026] to [0030], claims 12-13	1-10
A	US 5145658 A (CHAO) 08 September 1992 See abstract, figures 1-2, column 4, line 22 to column 5, line 30, column 10, line 32 to column 12, line 3	1-10



Further documents are listed in the continuation of Box C.



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