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(54) Title: ACID GAS REMOVAL SYSTEM FOR REMOVING ACIDIC GASES FROM GASEOUS HYDROCARBONS

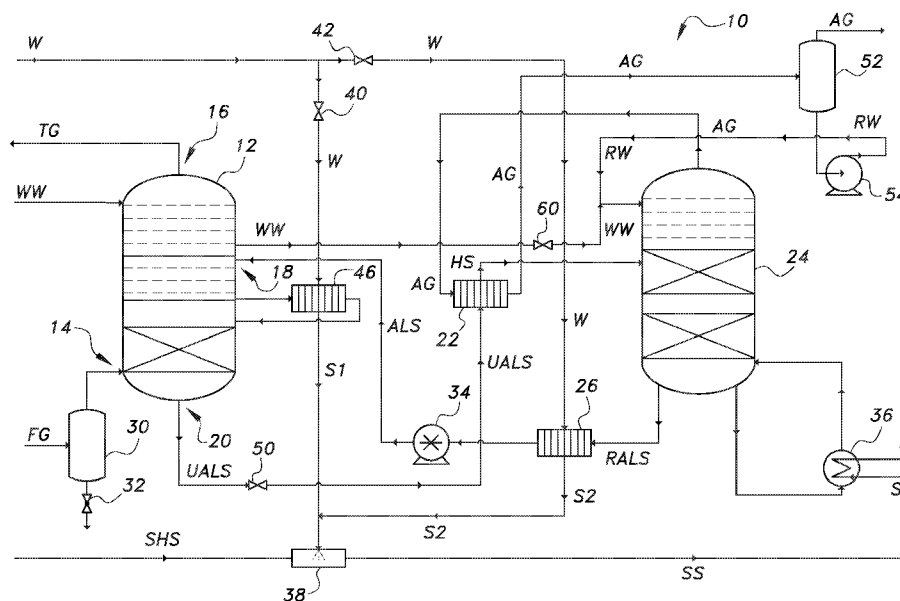


FIG. 1

(57) Abstract: The acid gas removal system for removing acidic gases from gaseous hydrocarbons (10) removes sour gases, such as hydrogen sulfide (H_2S) and carbon dioxide (CO_2), from an input gaseous stream. The system (10) includes a contactor (12) for contacting the input gaseous stream with an absorption liquid solvent (ALS), and a stripper (24) for recycling the absorption liquid solvent (ALS) and removing acidic gases (AG) therefrom, but with the addition of a pair of plate-plate heat exchangers (22, 26). The first heat exchanger (22) heats the used absorption liquid solvent (UALS) output from the contactor (12) prior to injection into the stripper (24). The used absorption liquid solvent (UALS) is heated via heat exchange with the acidic gases (AG) output from the stripper (24). The second heat exchanger (26) cools the recycled absorption liquid solvent (RALS) before injection back into the contactor (12).





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A. CLASSIFICATION OF SUBJECT MATTER**B01D 53/75(2006.01)i, B01D 53/14(2006.01)i, B01D 3/00(2006.01)i, B01D 53/00(2006.01)i**

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 47/06; B01D 53/14; B01D 53/40; B01D 53/62; B01D 53/78; F23G 7/00; F23G 7/06; B01D 3/00; B01D 53/00

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 gas, heat exchanger, absorbing, stripping, lean amine, rich amine

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	KR 10-2014-0038263 A (KOREA ELECTRIC POWER CORPORATION) 28 March 2014 See paragraphs [0031]-[0061]; fig. 2	1-20
A	KR 10-1536153 B1 (KOREA INSTITUTE OF ENERGY RESEARCH) 20 November 2015 See the whole document.	1-20
A	KR 10-0889597 B1 (KOLON GLOBAL CORPORATION) 20 March 2009 See the whole document.	1-20
A	KR 10-1422670 B1 (AMTAPACIFIC CO., LTD. et al.) 24 July 2014 See the whole document.	1-20
A	KR 10-2010-0094428 A (KIM JAE HYUN et al.) 26 August 2010 See the whole document.	1-20



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:

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"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

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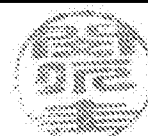
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INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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