



- (51) **International Patent Classification:**  
F25J 1/02 (2006.01) C10L 3/10 (2006.01)
- (21) **International Application Number:**  
PCT/EP2011/060826
- (22) **International Filing Date:**  
28 June 2011 (28.06.2011)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**  
10167839.9 30 June 2010 (30.06.2010) EP
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- (81) **Designated States (unless otherwise indicated, for every  
kind of national protection available):** AE, AG, AL, AM,  
AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,  
CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO,  
DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN,

HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,  
KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME,  
MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ,  
OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG,  
SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ,  
UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

- (84) **Designated States (unless otherwise indicated, for every  
kind of regional protection available):** ARIPO (BW, GH,  
GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG,  
ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ,  
TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK,  
EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV,  
MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM,  
TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,  
ML, MR, NE, SN, TD, TG).

**Declarations under Rule 4.17:**

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))

**Published:**

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

**(88) Date of publication of the international search report:**

2 July 2015

(54) **Title:** METHOD OF TREATING A HYDROCARBON STREAM COMPRISING METHANE, AND AN APPARATUS THEREFOR

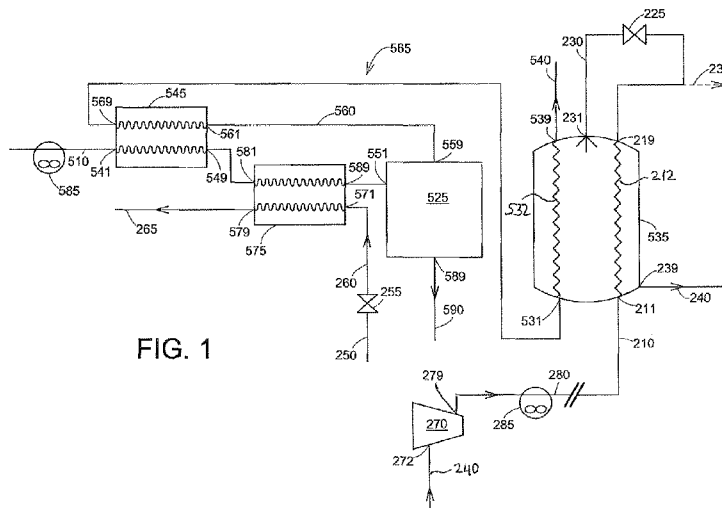


FIG. 1

(57) **Abstract:** A wet hydrocarbon stream (510) comprising at least methane and water, provided at a temperature equal to a first temperature, is cooled thereby lowering the temperature to a second temperature. In a water removal device (525) at least one wet disposal stream (590) comprising water is withdrawn from the wet hydrocarbon stream, at the second temperature. An effluent stream (560), comprising the wet hydrocarbon stream from which the at least one wet disposal stream (590) has been removed, is discharged from the water removal device (525) and passed to a further heat exchanger (535). At least one refrigerant stream (210) is also passed to the further heat exchanger (535), and both the effluent stream (560) and the refrigerant stream (210) are cooled in the further heat exchanger (535) by indirect heat exchanging against an evaporating refrigerant fraction (230). The effluent stream (560) is heated by indirectly heat exchanging against the wet hydrocarbon stream (510), wherein said cooling of the wet hydrocarbon stream (510) comprises this indirectly heat exchanging.



**INTERNATIONAL SEARCH REPORT**

International application No  
PCT/EP2011/060826

A. CLASSIFICATION OF SUBJECT MATTER  
INV. F25J1/02 C10L3/10  
ADD.  
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)  
F25J C10L  
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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Y	DE 102 26 596 A1 (LINDE AG [DE]) 15 January 2004 (2004-01-15) paragraphs [0005], [0006]; figures	1-15
Y	GB 2 102 930 A (SNAM PROGETTI [IT]) 9 February 1983 (1983-02-09) page 1, lines 117-123 page 3, lines 93-103 figure	1-15
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Further documents are listed in the continuation of Box C.

See patent family annex.

\* Special categories of cited documents :

<p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>	<p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"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</p> <p>"&amp;" document member of the same patent family</p>
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Date of the actual completion of the international search  12 May 2015	Date of mailing of the international search report  21/05/2015
Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer  Göritz, Dirk

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International application No  
PCT/EP2011/060826

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
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