

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
29 December 2004 (29.12.2004)

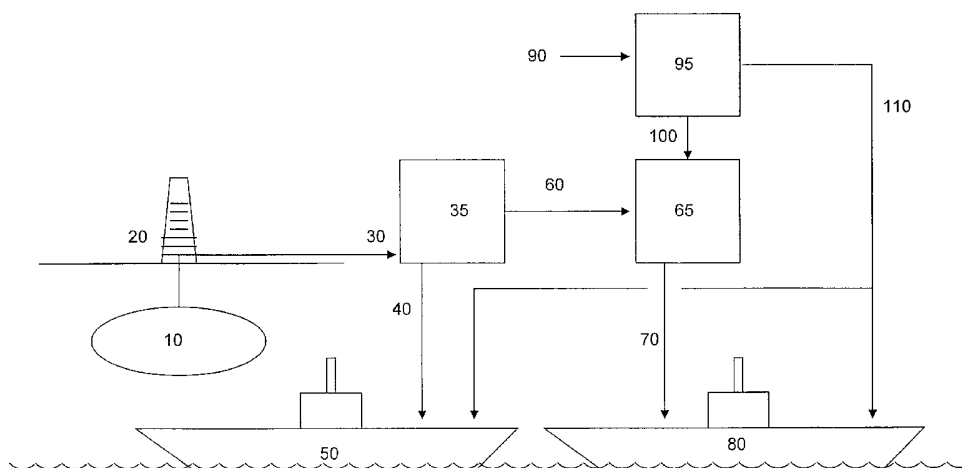
PCT

(10) International Publication Number
WO 2004/113472 A3

- (51) International Patent Classification⁷: C07C 27/00, 7/20, C10G 35/00
- (21) International Application Number: PCT/US2004/019297
- (22) International Filing Date: 16 June 2004 (16.06.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 10/464,543 19 June 2003 (19.06.2003) US
- (71) Applicant (for all designated States except US): CHEVRON U.S.A. INC. [US/US]; 6001 Bollinger Canyon Road, Building T, 3rd Floor, San Ramon, CA 94583 (US).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): O'REAR, Dennis, J. [US/US]; 40 Upland Drive, Petaluma, CA 94952 (US).
- (74) Agents: ZAVELL, Stephen, A. et al.; Chevrontexaco Corporation, Law Department, Post Office Box 6006, San Ramon, CA 94583-0806 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— with international search report

[Continued on next page]

(54) Title: USE OF WASTE NITROGEN FROM AIR SEPARATION UNITS FOR BLANKETING CARGO AND BALLAST TANKS



(57) Abstract: The present invention relates to the use of a primarily nitrogen containing blanketing agent from the air separation unit (95) of a Gas To Liquids (30), Heavy Hydrocarbon Conversion, or Methanol Synthesis Facility on transport vessels. The primarily nitrogen containing blanketing agent is used to reduce corrosion, reduce product biodegradation and oxidation, control invasive species, and prevent fires and explosions by reducing oxygen content. Accordingly, the present invention relates to integrated processes for producing hydrocarbonaceous products (70) and using a primarily nitrogen containing blanketing agent supplied from the process in shipping the products.

WO 2004/113472 A3



— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(88) Date of publication of the international search report:
10 November 2005

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/19297

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C07C 27/00, 7/20; C10G 35/00

US CL : 585/899, 208/133; 518/700, 702

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)

U.S. : 585/899, 208/133; 518/700, 702

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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	6,518,321 B1 (O' REAR et al) 11 February 2003. see entire patent.	1
A	US 6,541,524 B2 (O'REAR et al) 01 April 2003, see entire patent.	1
A,P	US 6,596,781 B1 (SCHINSKI) 22 July 2003, see entire patent.	1

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"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

"E" earlier application or patent published on or after the international filing date

"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

"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)

"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

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"&" document member of the same patent family

Date of the actual completion of the international search

Date of mailing of the international search report

22 August 2005 (22.08.2005)

23 SEP 2005

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US

Commissioner for Patents

P.O. Box 1450

Alexandria, Virginia 22313-1450

Facsimile No. (703) 305-3230

Authorized officer

Cheri Calderola

Telephone No. (571)-272-1700