

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
6 July 2006 (06.07.2006)

PCT

(10) International Publication Number
WO 2006/069992 A1

(51) International Patent Classification:

B01D 53/22 (2006.01) **C07C 7/144** (2006.01)
B01D 53/92 (2006.01) **C07D 301/32** (2006.01)

Fredericus [NL/NL]; Badhuisweg 3, NL-1031 CM Amsterdam (NL). **WESTERINK, Anton Pieter** [NL/NL]; Badhuisweg 3, NL-1031 CM Amsterdam (NL).

(21) International Application Number:

PCT/EP2005/057174

(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, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(22) International Filing Date:

27 December 2005 (27.12.2005)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

04107076.4 31 December 2004 (31.12.2004) EP

(71) **Applicant** (for all designated States except US): **SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V.** [NL/NL]; Carel Van Bylandtlaan 30, NL-2596 HR The Hague (NL).

(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, IS, IT, LT, LU, LV, 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).

(72) **Inventors; and**

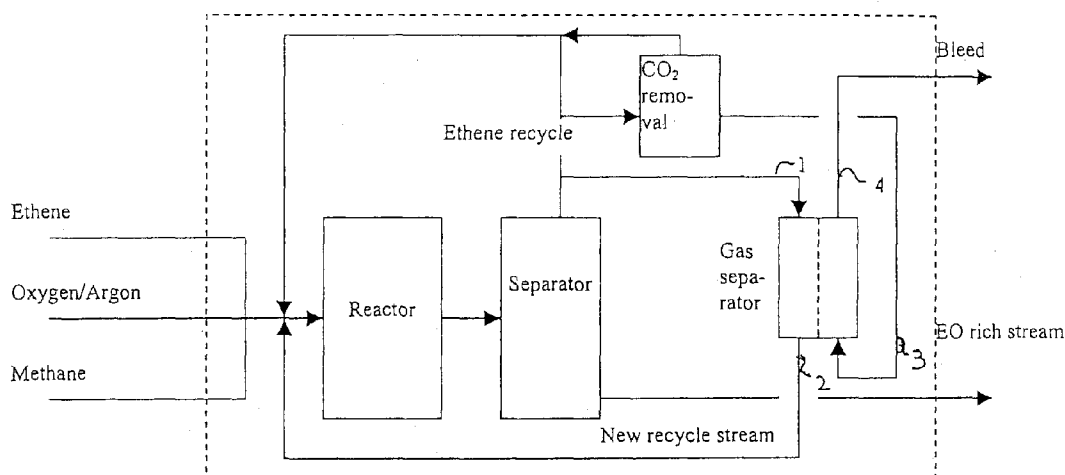
(75) **Inventors/Applicants** (for US only): **BUIJS, Andre** [NL/NL]; Badhuisweg 3, NL-1031 CM Amsterdam (NL). **HARMSEN, Gerrit Jan** [NL/NL]; Badhuisweg 3, NL-1031 CM Amsterdam (NL). **MULDER, Dominicus**

Published:

— with international search report

[Continued on next page]

(54) **Title:** INTEGRATED PREPARATION AND SEPARATION PROCESS



Schematic representation of the configuration of example 2

(57) **Abstract:** Integrated preparation and separation process comprising a preparation process wherein a byproduct is produced; and a gas separation process wherein a first component is separated from a mixture of components by diffusion of the first component through a porous partition into a stream of sweeping component; wherein the byproduct produced in the preparation process is subsequently used as the sweeping component in the separation process, and an industrial set-up for use in such a process.



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.