



PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification⁶ :B01J 8/22, C10G 2/00, B01D 3/00, C07C
1/06

A1

(11) International Publication Number:

WO 99/17870

(43) International Publication Date:

15 April 1999 (15.04.99)

(21) International Application Number: PCT/GB98/02946

(22) International Filing Date: 1 October 1998 (01.10.98)

(30) Priority Data:

97/8966

7 October 1997 (07.10.97)

ZA

(71) Applicant (for all designated States except US): SASOL
TECHNOLOGY (PROPRIETARY) LIMITED [ZA/ZA]; 1
Sturdee Avenue, Rosebank, Johannesburg (ZA).(71) Applicant (for SD only): SASOL CHEMICALS EUROPE
LIMITED [GB/GB]; 1 Hockley Court, 2401 Stratford Road,
Hockley Heath, Solihull, West Midlands B94 6NW (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): STEYNBERG, André,
Peter [ZA/ZA]; 4 Moerdyk Street, Vanderbijlpark 1911
(ZA). JONES, David, H. [US/US]; 15 Jefferson Street,
Newton, MA 02158 (US). SILVERMAN, Roy, W. [US/US];
12 Salem Street, Winchester, MA 01890 (US).(74) Agent: ABLEWHITE, Alan, James; Marks & Clerk, 57-60
Lincolns Inn Fields, London WC2A 3LS (GB).(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR,
BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR,
KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN,
MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK,
SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW,
ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR,
GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF,
BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN,
TD, TG).

Published

With international search report.

(54) Title: PROCESS FOR PRODUCING LIQUID AND, OPTIONALLY, GASEOUS PRODUCTS FROM GASEOUS REACTANTS

(57) Abstract

The process of the invention comprises feeding gaseous reactants into a slurry bed of particles suspended in a liquid. The gaseous reactants (13) react in the slurry bed (16), to form liquid and, optionally, gaseous products. The liquid product forms, together with the suspension liquid, a liquid phase of the slurry bed (16). Any gaseous product and unreacted gaseous reactants disengage from the slurry bed, and pass upwardly, together with any entrained solid particles and liquid phase, as a gas phase into a head space (17) above the slurry bed (16). The gas phase is subjected to distillation and, optionally, washing in the head space, to separate any entrained solid particles and liquid phase from the gas phase. Any separated entrained solid particles and, optionally, liquid phase is returned to the slurry bed. The treated gas phase is withdrawn (44, 46) from the head space.

