(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
31 October 2002 (31.10.2002)

PCT

(10) International Publication Number
WO 02/086025 A1

(51) International Patent Classification[7]: C10G 65/08

(21) International Application Number: PCT/EP02/04417

(22) International Filing Date: 19 April 2002 (19.04.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
01400996.3 19 April 2001 (19.04.2001) 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).

(72) Inventors; and

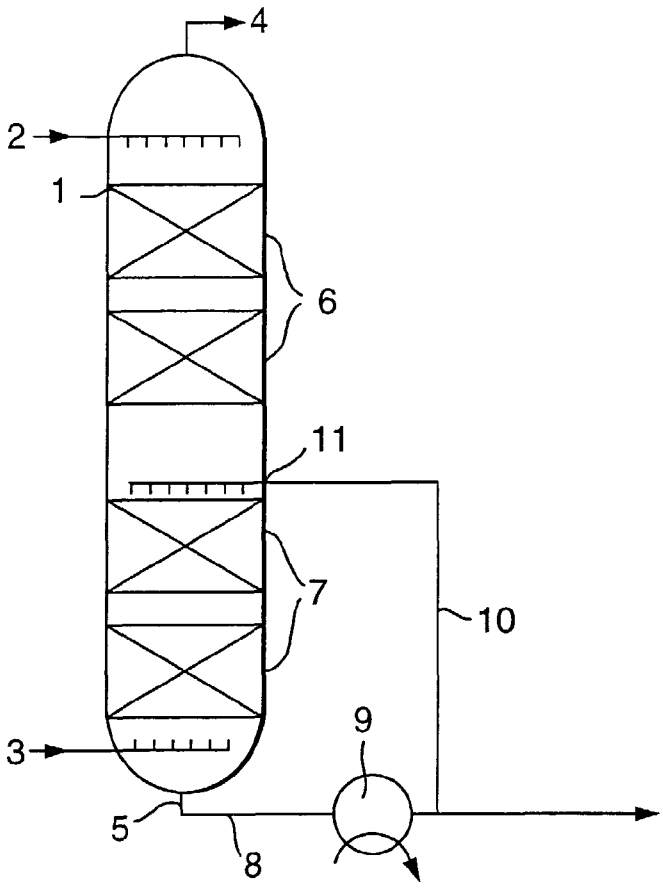
(75) Inventors/Applicants *(for US only)*: **COLLIN, Marc** [FR/FR]; Route Departementale no. 3, F-76650 Petit Couronne (FR). **DUPREY, Eric** [FR/FR]; Route Departementale no. 3, F-76650 Petit Couronne (FR).

(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, 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, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, 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, TR), OAPI patent

[Continued on next page]

(54) Title: PROCESS TO PREPARE A BASE OIL HAVING A HIGH SATURATES CONTENT



(57) Abstract: Process to prepare a base oil having a saturates content of more than 90 wt%, a sulphur content of less than 0.03 wt% and a viscosity index of between 80 and 120 from a solvent refined base oil feedstock, which process comprises: (a) contacting the solvent refined base oil feedstock in the presence of a hydrogen containing gas in a first reaction zone containing one or more fixed beds of a catalyst, which catalyst comprises at least one Group VIB metal component and at least one non-noble Group VIII metal component supported on a refractory oxide carrier; (b) contacting the effluent of step (a) in the presence of a hydrogen containing gas in a second reaction zone containing one or more fixed beds of a catalyst, which catalyst comprises a catalyst comprising a noble metal component supported on an amorphous refractory oxide carrier, wherein the oil feedstock in step (a) flows counter-current to the upflowing hydrogen containing gas.

WO 02/086025 A1

(BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report*

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.