

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
19 June 2003 (19.06.2003)

PCT

(10) International Publication Number
WO 03/050206 A1

(51) International Patent Classification⁷: **C10G 31/09**,
53/02, 55/04

(21) International Application Number: PCT/US02/38702

(22) International Filing Date: 3 December 2002 (03.12.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/341,111 12 December 2001 (12.12.2001) US
10/293,397 12 November 2002 (12.11.2002) US

(71) Applicant: **EXXONMOBIL RESEARCH AND ENGINEERING COMPANY** [US/US]; 1545 Route 22 East, P.O. Box 900, Annandale, NJ 08801-0900 (US).

(72) Inventors: **SISKIN, Michael**; 56 Shongum Road, Randolph, NJ 07869 (US). **HEMRAJANI, Ramesh, Relumal**; 238 Skyline Drive, Millington, NJ 07946 (US).

PHILLIPS, Glen, Edward; 3550 Gold Rush Lane, Gold-
vein, VA 22720 (US). **KELEMEN, Simon, Robert**; 64
Mount Grove Road, Annandale, NJ 08801 (US). **QIAN,**
Kuangnan; 45 Hendrickson Drive, Belle Mead, NJ 08502
(US).

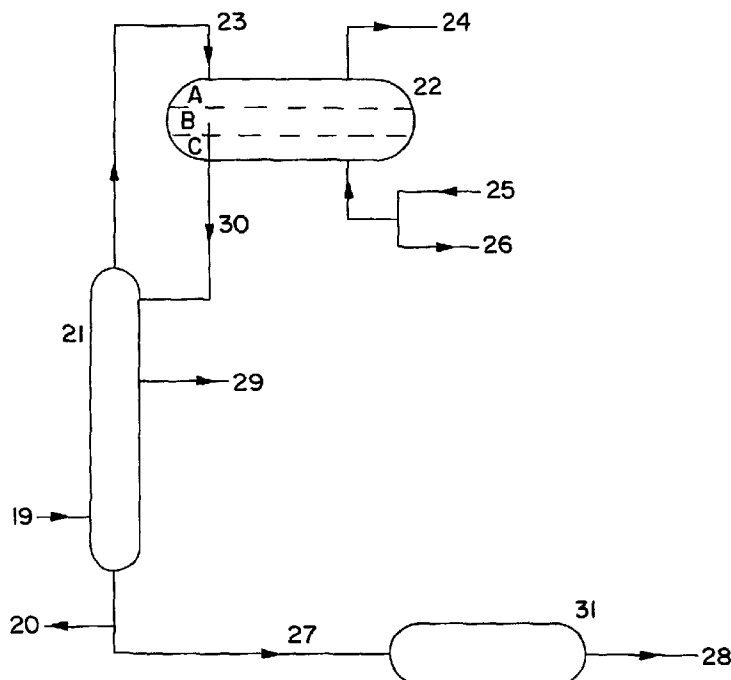
(74) Agents: **PURWIN, Paul, E.** et al.; ExxonMobil Research
and Engineering Company, P.O. Box 900, 1545 Route 22
East, Annandale, NJ 08801-0900 (US).

(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,
SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, 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, BG, CH, CY, CZ, DE, DK, EE,

[Continued on next page]

(54) Title: PROCESS FOR INCREASING YIELD IN COKING PROCESSES



(57) Abstract: The invention relates to a method for improving yield in petroleum streams derived from coking processes. In a preferred embodiment, the invention relates to a method for regenerating filters employed to remove particulate matter from coker gas oil to improve coker gas oil yield and yield of upgraded coker gas oil products. It has been discovered that the accumulated foulant on the filter may be removed and filter permeability can be restored by contracting the filter with a treatment solution comprising hydrogen peroxide.



WO 03/050206 A1



ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK,
TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

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.

Published:

— *with international search report*