

(51) International Patent Classification:
C10G 55/02 (2006.01)

(21) International Application Number:

PCT/US2011/022309

(22) International Filing Date:

25 January 2011 (25.01.2011)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/298,290 26 January 2010 (26.01.2010) US

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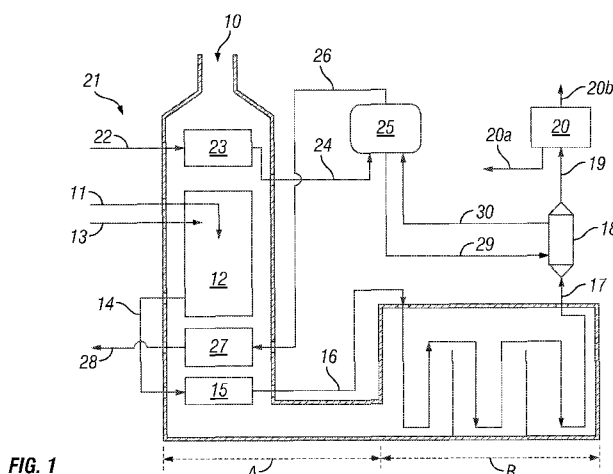
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(US).(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO,
DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,
HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP,
KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,
ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI,
NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD,
SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR,
TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG,
ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ,
TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU,
LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK,
SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

(54) Title: METHOD AND APPARATUS FOR QUENCHING A HOT GASEOUS STREAM



(57) Abstract: The invention comprises a process for cracking liquid hydrocarbon feed to produce cracked gaseous hydrocarbons comprising feeding a liquid hydrocarbon feed stream to an olefins furnace; cracking the liquid hydrocarbon feed stream in the olefins furnace to produce a gaseous cracked effluent stream; feeding the cracked effluent from the olefins furnace to a primary transfer line heat exchanger (TLE) having two sections; injecting a first wetting fluid in a weight ratio of wetting fluid to hot gaseous effluent tangentially into the hot gaseous effluent stream at a particular location in the second section of the primary TLE; feeding the hot gaseous effluent stream exiting from the TLE to a separator; separating a separator bottoms stream comprising tar and heavier hydrocarbons and a separator product stream comprising an olefin product; and recovering an olefin product from the separator product stream.