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(71) Applicant: **EXXONMOBIL CHEMICAL PATENTS INC.** [US/US]; 5200 Bayway Drive, Baytown, TX 77520-2101 (US).

(72) Inventors: **DAKKA, Jihad, M.**; 3 Gleim Road, Whitehouse Station, NJ 08889 (US). **PATEL, Bryan, A.**; 277 Third St., Apt. 2, Jersey City, NJ 07302 (US).

(74) Agents: **CHEN, Siwen** et al.; Exxonmobil Chemical Company, Law Technology, P.O. Box 2149, Baytown, TX 77522-2149 (US).

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(54) Title: PROCESS FOR MAKING PHENOL AND/OR CYCLOHEXANONE

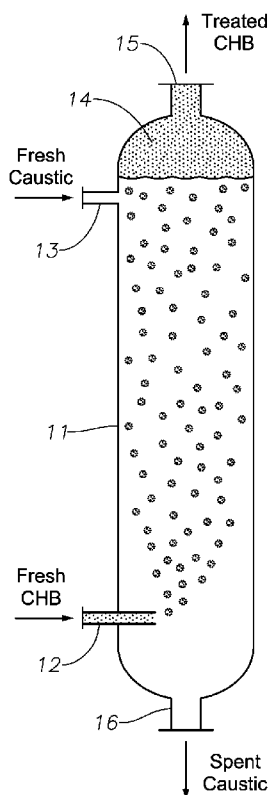


FIG. 1

(57) **Abstract:** A process for making phenol and/or cyclohexanone comprises: (A) oxidizing a cyclohexylbenzene feed to obtain an oxidation product comprising cyclohexylbenzene, cyclohexyl-1-phenyl-1-hydroperoxide and phenol; (B) separating at least a portion of the oxidation product to obtain a first fraction comprising cyclohexyl-1-phenyl-1-hydroperoxide and a second fraction comprising cyclohexylbenzene and phenol; (C) removing at least a portion of the phenol from at least a portion of the second fraction to obtain a third fraction; (D) recycling at least a portion of the cyclohexylbenzene in the third fraction to the oxidizing step (A); and (E) contacting at least a portion of the cyclohexyl-1-phenyl-1-hydroperoxide in the first fraction with an acid catalyst in a cleavage reactor under cleavage conditions to obtain a cleavage product comprising phenol and cyclohexanone.



KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, 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.

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