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(54) Title: PROCESS FOR PRODUCING PHENOL

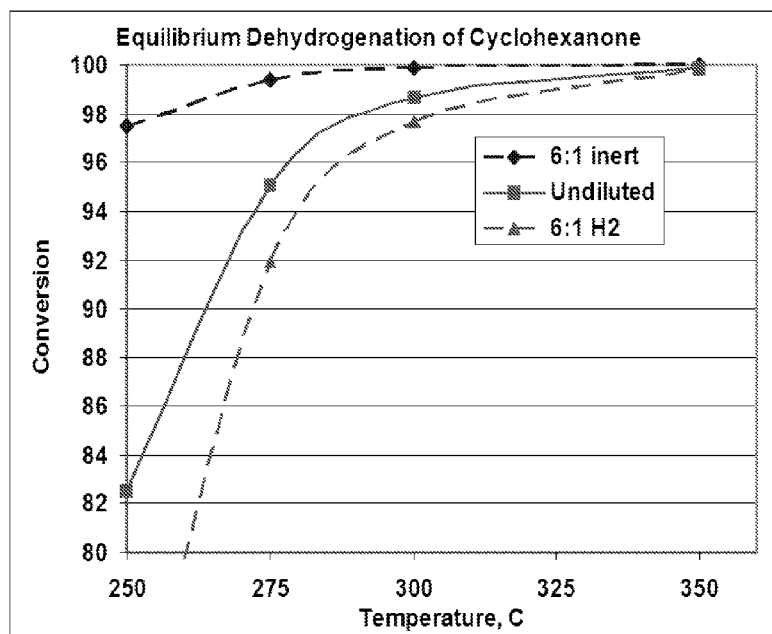


FIGURE 1

[Continued on next page]



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, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

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**(57) Abstract:** In a process for producing phenol, cyclohexylbenzene is oxidized to produce cyclohexylbenzene hydroperoxide and then the resultant cyclohexylbenzene hydroperoxide is cleaved to produce an effluent stream comprising phenol and cyclohexanone. At least a portion of the effluent stream is then fed to at least one dehydrogenation reaction zone, where the effluent stream portion is contacted with a dehydrogenation catalyst under conditions effective to convert at least part of the cyclohexanone in the effluent portion into phenol and hydrogen.