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

(72) Inventors: **BECKER, Christopher, L.**; 3109 Driftwood Dr., Manhattan, KS 66503 (US). **LATTNER, James, R.**; 10 Bay Oaks, LaPorte, TX 77571 (US). **BENITEZ, Francisco, M.**; 19708 N. Palo Duro Lake Trl., Cypress, TX 77433 (US). **SMITH, Charles, Morris**; 2402 Milam, Apt. 4319, Houston, TX 77006 (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: SYSTEM AND PROCESS FOR MAKING PHENOL AND/OR CYCLOHEXANONE

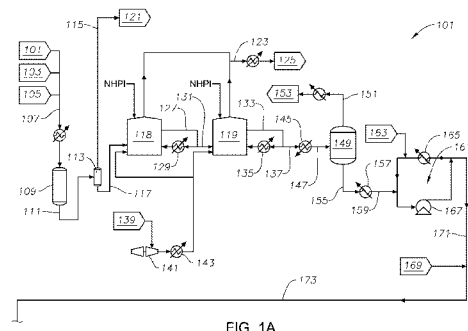


FIG. 1A

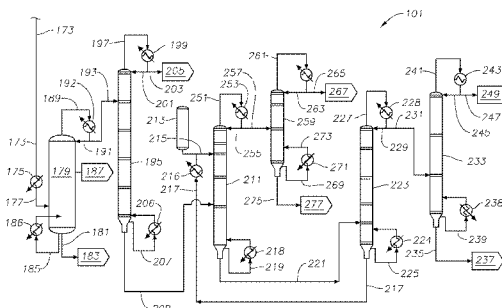


FIG. 1B

(57) Abstract: A system for producing high-purity phenol and/or cyclohexanone from cyclohexylbenzene oxidation includes a cyclohexylbenzene feed hydrogenation reactor, a bubble column oxidation reactor, a cyclohexylbenzene hydroperoxide concentrator, a cleavage reactor, and a separation and purification sub-system. The components and the integrated system are designed such that high-purity phenol and/or cyclohexanone can be produced at high energy efficiency.

**Declarations under Rule 4.17:**

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- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

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