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

(57) **Abstract:** In a process for producing phenol and/or cyclohexanone, benzene and hydrogen are contacted with a first catalyst in a hydroalkylation step to produce a first effluent stream comprising cyclohexylbenzene, cyclohexane, and unreacted benzene. At least part of the first effluent stream is supplied to a first separation system to divide the first effluent stream part into a cyclohexylbenzene-rich stream and a C6 product stream comprising unreacted benzene and cyclohexane.



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