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(54) Title: PROCESS FOR SEPARATING A MIXTURE COMPRISING CYCLOHEXANONE AND PHENOL

(57) Abstract: In a process for separating a mixture comprising cyclohexanone and phenol, at least a portion of the mixture is distilled in the presence of a solvent including at least two alcoholic hydroxyl groups attached to non-adjacent saturated carbon atoms, water, and in the presence or absence of a hemiketal defined by the formula (I) or the formula (II): wherein R¹, the same or different at each occurrence, is independently an alkylene group having from 2 to 10 carbon atoms, R² is an alkylene group having from 4 to 10 carbon atoms and/or R³ is hydrogen or the following group: and in the presence or absence of an enol-ether derived from the hemiketal defined by the formula (I) or the formula (II), wherein the total concentration of the hemiketal and enol-ether, expressed in term of weight percentage of the total weight of the feed to the distilling step, is at most 0.01%.

