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(54) Title: PROCESS FOR REMOVING METHANOL FROM WASTE GAS

(57) Abstract: Injection of even very small amounts of supplemental water to the spent-air stream at points upstream from the heat exchanger cooler(s) used in processing spent-air streams from a cumene-to-phenol process allows these heat exchanger coolers to act as both extractors and condensers. It is therefore possible to recover from the heat exchanger cooler a methanol/water condensate, thereby substantially reducing the amount of methanol in the spent-air stream prior to discharge. Thus, known methods of manufacture of phenol from cumene in which an oxygen-containing gas stream is passed through liquid cumene to produce an oxidate product and a spent-air stream comprising methanol and cumene and a saturating amount of water; and in which the spent-air stream is passed through one or more heat exchanger coolers and a carbon bed prior to discharge can be improved.