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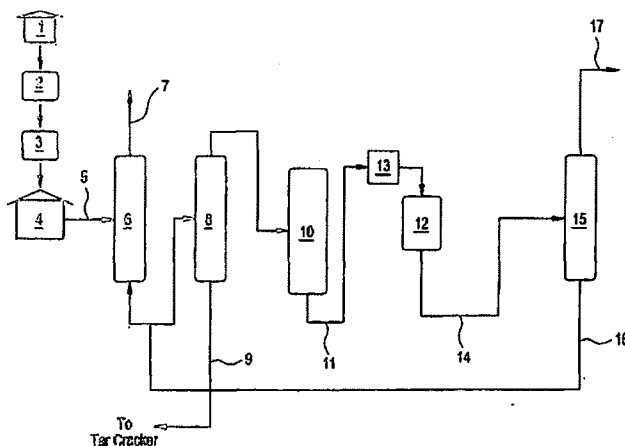
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(54) Title: PRODUCTION AND PURIFICATION OF PHENOL: HYDROXYACETONE REMOVAL BY HYDROTALCITE



(57) Abstract: A process for converting carbonyl-type impurities contained in a phenolic solvent to high-boiling derivatives is provided by contacting the phenolic solvent with a hydrotalcite-type material (HTM). The phenol can be separated from the high-boiling derivatives using conventional separation techniques, such as distillation, so the invention also provides a process for separating carbonyl-type impurities, such as hydroxyacetone (HA), from phenolic solvent. The process can be applied in the conventional industrial process for converting cumene to phenol to remove carbonyl-type impurities from the phenol product. A process and a facility for producing purified phenol by converting cumene to phenol are provided. In the conversion of cumene to phenol, the phenol often contains carbonyl-type impurities. The phenol and carbonyl-type impurities are reacted in the presence of an HTM to produce phenol and high-boiling derivatives. The phenol may be further purified using conventional separation techniques, such as distillation, to remove the high boiling derivatives.

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