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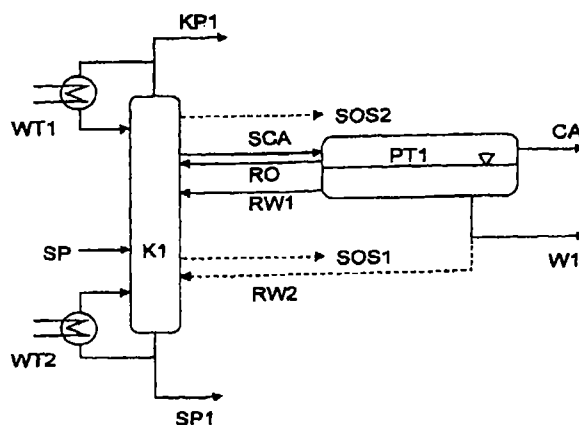
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For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.(54) Title: PROCESS AND APPARATUS FOR THE WORK-UP BY DISTILLATION OF CLEAVAGE PRODUCT MIXTURES
PRODUCED IN THE CLEAVAGE OF ALKYLARYL HYDROPEROXIDES

ACTION

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(57) Abstract: The present invention claims a process and an apparatus for the work-up by distillation of cleavage product mixtures produced in the cleavage of alkylaryl hydroperoxides. Usually, in the work-up by distillation of cleavage product mixtures which are produced in the cleavage of alkylaryl hydroperoxides, the cleavage product mixture is divided into three main fractions, for which at least two distillation columns are used. The use of two distillation columns has the disadvantage that the capital costs, and also the energy costs, in these conventional processes are relatively high. By means of the inventive process for the work-up by distillation of cleavage product mixtures, the equipment requirements and the energy consumption can be markedly reduced in comparison with customary plants, since the cleavage product mixture can be resolved into the three main fractions in only one apparatus. The inventive process can be used for the work-up by distillation of cleavage product mixtures produced in the cleavage of alkylaryl hydroperoxides, in particular in the cleavage of cumene hydroperoxide. By using the inventive process it is possible to separate off phenol and acetone from a cleavage product mixture that was obtained in the cleavage of cumene hydroperoxide.