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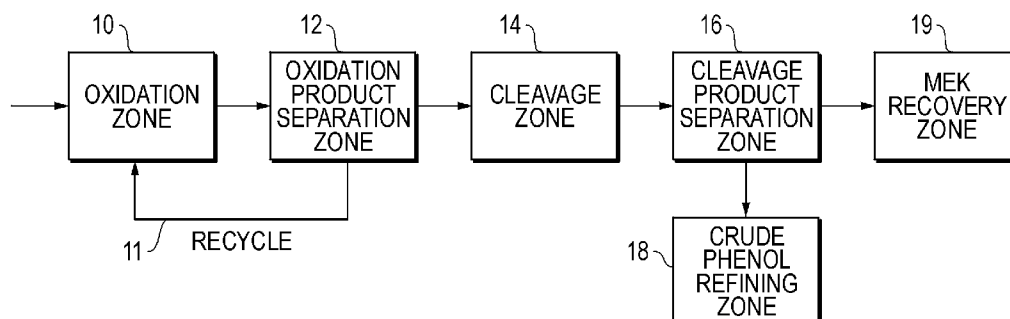


FIG. 1

(57) Abstract: A method for producing acetophenone comprising: treating one or more alkylbenzenes comprising s-butylbenzene to produce a feed comprising phenol and acetophenone; separating a crude phenol stream from the feed under crude phenol separation conditions effective to produce a crude phenol heavies; and, separating an acetophenone stream directly from the crude phenol heavies under azeotropic distillation conditions.

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