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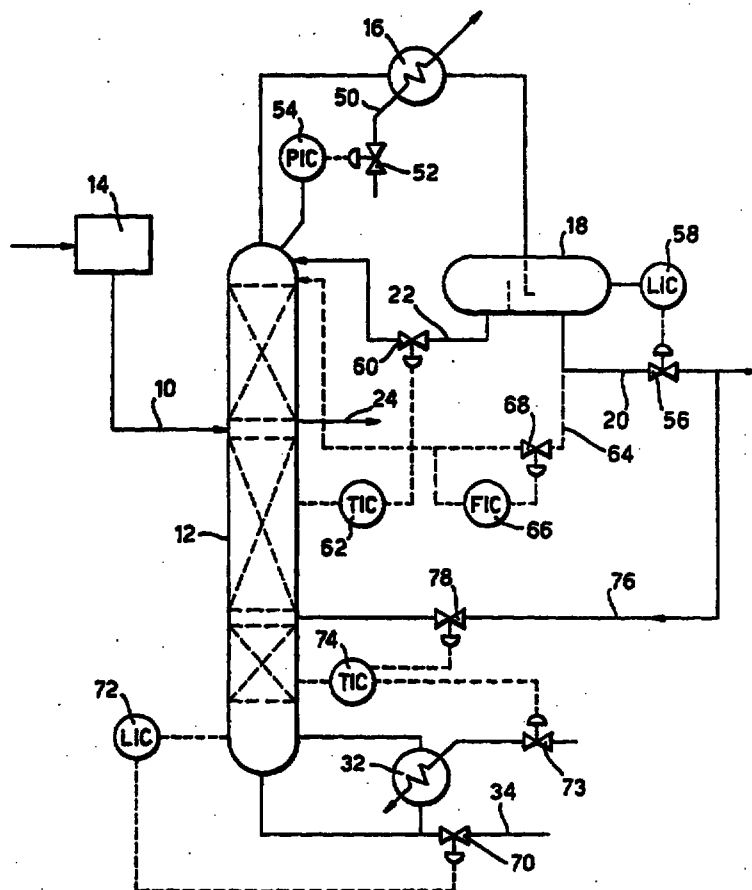
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(54) Title: **DEHYDRATION OF ACETIC ACID BY AZEOTROPIC DISTILLATION IN THE PRODUCTION OF AN AROMATIC ACID**

(57) Abstract

In a process for production of an aromatic dicarboxylic acid such as terephthalic acid by the liquid phase oxidation of a precursor (e.g. p-xylene) thereof, an overheads stream (10) comprising aqueous aliphatic carboxylic acid is subjected to azeotropic distillation in column (12) to reduce the water content. The azeotropic distillation may be carried out using reflux of the entrainer only (22) with control of entrainer penetration to obtain a bottoms product (34) which is substantially entrainer free and contains a predetermined amount of residual water. Any aromatic dicarboxylic acid precursor present in the overheads stream is separated from the aliphatic carboxylic acid by withdrawal at a location (24) in the vicinity of the point of introduction of the feed (10) into the column. The amount of water in the bottoms product (34) may be controlled by regulation of a separate water feed (76) to the lower section of the azeotropic distillation column. In addition, regulation of the reflux rate (via line 22) may be employed to control the water content of the bottoms product and maintain column operation in the event of loss of feed to the column.



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