

ABSTRACT OF THE DISCLOSURE

A process and an apparatus for producing terephthalic acid economically by oxidizing paraxylene supplied to an oxidizing reactor connected with a compactly designed distillation column in an acetic acid-based solvent, while effecting the distillatory recovery of the paraxylene and acetic acid efficiently without suffering from stuffing of the distillation column, which process comprises

supplying paraxylene and a molecular oxygen-containing gas to the oxidizing reactor connected to a distillation column having at the lower part thereof a solid matter collecting tray consisting of a perforated ripple plate and, above it, a packed bed and further, above it, a liquid distribution tray, in order to cause oxidation of the paraxylene in a solvent based on acetic acid in the presence of a catalyst to form terephthalic acid,

introducing the oxidation exhaust gas into the distillation column and collecting finely dispersed solid matters by means of the solid matter collecting tray, and

effecting distillation of substances contained in the oxidation exhaust gas through the packed bed, while removing heat and water out of the distillation column and recirculating the separated paraxylene and acetic acid to the oxidizing reactor.

This Sheet Has Been Replaced

