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(54) Title: METHODS OF EXTRACTING CATALYST IN SOLUTION IN THE MANUFACTURE OF ADIPIC ACID

(57) Abstract

This invention relates to methods of extracting in solution a metal catalyst from a reaction mixture produced by oxidizing cyclohexane to adipic acid in the presence of acetic acid and the metal catalyst. According to this invention, substantially the totality of the cyclohexane is removed, as well as a major part of the adipic acid. A major part of the acetic acid is also removed without precipitating catalyst, thus forming a concentrate in solution. In a preferred embodiment of the instant invention, the concentrate enters a counter-current stream of counter flowing water and cyclohexanone, resulting in an aqueous solution of metal catalyst, which is the extract, and a phase of concentrate solution dissolved in cyclohexanone, which is the raffinate. The two solutions are further treated and/or recycled.

