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(54) Title: OXIDATION OF HYDROCARBONS TO ACIDS IN THE PRESENCE OF FLUORO COMPOUNDS

(57) Abstract

This invention relates to methods of oxidizing hydrocarbons, such as cyclohexane, o-xylene, m-xylene, and p-xylene, to form a respective acid, such as adipic acid, phthalic acid, isophthalic acid, and terephthalic acid, for example, by introducing into the reaction mixture small critical amounts of fluorocompounds. Preferable fluorocompounds are perfluoroacids, such as for example perfluoroacetic acid, perfluorobutyric acid, and perfluorooctanoic acid. By introducing the critical amounts of the fluorocompounds, the reactivity increases without sacrificing yield and/or selectivity.

