

ORIGINAL

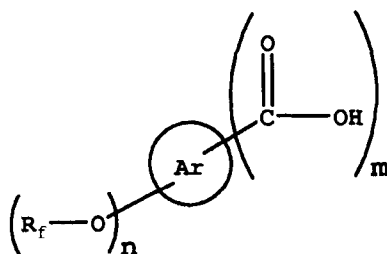
PROCESS FOR THE SYNTHESIS OF FLUORINATED ETHERS OF AROMATIC
ACIDS

Abstract of the Invention

Fluorinated ethers of aromatic acids are produced from halogenated aromatic acids in a reaction mixture containing a copper (I) or copper (II) source and a diketone ligand that coordinates to copper. The fluorinated ethers of aromatic acids made using the process described herein can be applied to, e.g., fibers, yarns, carpets, garments, films, molded parts, paper and cardboard, stone, and tile to impart soil, water and oil resistance. By incorporating the fluorinated ethers of aromatic acids, or diesters thereof, into polymer backbones, more lasting soil, water and oil resistance, as well as improved flame retardance, can be achieved.

WE CLAIM :

1. A process for preparing a fluorinated ether of an aromatic acid, the ether being represented by the structure of the following Formula I:



wherein Ar is a C₆~C₂₀ monocyclic or polycyclic aromatic nucleus, n and m are each independently a nonzero value, n+m is less than or equal to 8, and wherein R_f is a fluorinated alkyl, alkaryl, aralkyl, or aryl group, optionally containing one or more ether linkages -O- , with the proviso that R_f is not attached to the ether oxygen in Formula I via a CF₂ group or a CF₂CH₂CH₂ group, comprising:

(a) contacting a halogenated aromatic acid that is represented by the structure of the following Formula II:

