

METHOD AND APPARATUS FOR SYNTHESIZING OLEFINS, ALCOHOLS, ETHERS, AND ALDEHYDES

Abstract

A reactant selected from the group consisting of alkanes, alkenes, alkynes, dienes, and aromatics is reacted with a halide selected from the group including chlorine, bromine, and iodine to form a first reaction product. The first reaction product is reacted with a solid oxidizer to form a product selected from the group including olefins, alcohols, ethers, and aldehydes, and spent oxidizer. The spent oxidizer is oxidized to form the original solid oxidizer and the second reactant which are recycled.

No suitable figure