Continuous heterogeneously catalyzed gas-phase partial oxidation of an organic compound

Abstract

In a process for the continuous heterogeneously catalyzed gas-phase partial oxidation of an organic compound in an oxidation reactor, whose feed gas mixture comprises, apart from the organic compound to be partially oxidized and molecular oxygen as oxidant, at least one diluent gas which is essentially inert under the conditions of the heterogeneously catalyzed gas-phase partial oxidation, where the essentially inert diluent gas consists partly of combustible gases, after passage through the oxidation reactor, the combustible constituents of the inert diluent gas present in the product gas stream leaving the oxidation reactor are not recirculated to the heterogeneously catalyzed gas-phase partial oxidation, but are put to further use for the purposes of another chemical reaction.

This Sheet Has Been Replaced