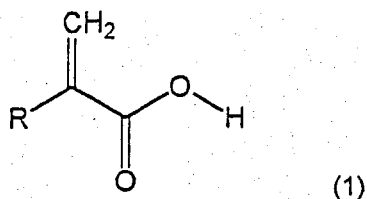


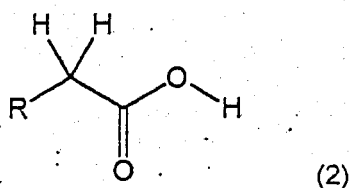
Abstract

PROCESS FOR PRODUCING α, β -UNSATURATED CARBOXYLIC ACID

There is disclosed a process for producing α, β -unsaturated carboxylic acid of formula (1):



- 5 wherein R represents a hydrogen atom, an alkyl group, an aryl group, an aralkyl group, an alkenyl group or an alkynyl group, which is characterized by reacting a carboxylic acid of formula (2):



- 10 wherein R represents the same as defined above, with formaldehyde or a precursor thereto in the presence of a sulfate of nickel, cobalt, iron, aluminum, copper, chromium, manganese, zirconium, zinc, silver, palladium, indium, or vanadyl, or mixtures thereof.