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(54) Title: VINYL ACETATE CATALYST COMPRISING METALLIC PALLADIUM, COPPER AND GOLD AND PREPARATION THEREOF

(57) Abstract

A catalyst for the production of vinyl acetate by reaction of ethylene, oxygen and acetic acid, comprising a porous support on the porous surfaces of which is deposited catalytically effective amounts of metallic copper, palladium and gold. The catalyst is prepared by steps comprising precoating the support with a water–insoluble form of copper, forming on the precoated support a water–insoluble palladium compound, reducing the palladium compound, and, if not previously reduced, the water–insoluble form of copper, to a catalytically effective amount of the free metal, impregnating the copper and palladium containing support with a solution of potassium aurate, and reducing the potassium aurate to a catalytically effective amount of metallic gold. The inventive process results in a catalyst wherein the Pd, Cu, and Au form a shell metal distribution on the catalyst support.