

HYDROGENATION CATALYSTS AND PROCESSES THEREWITH

ABSTRACT OF THE DISCLOSURE

A composition and a process for using the composition in a selective hydrogenation of a highly unsaturated hydrocarbon such as, for example, an alkyne or diolefin, to a less unsaturated hydrocarbon such as, for example, an alkene or a monoolefin, are disclosed. The composition comprising palladium, silver, and a spinel wherein the palladium and silver are each present in a sufficient amount to effect the selective hydrogenation of an unsaturated hydrocarbon. Optionally, the palladium is present as skin distributed on the surface of the spinel. The composition can further comprise an alkali metal-containing compound such as, for example, potassium fluoride.