

## Title (en)

CATALYSTS FOR MAKING ETHANOL FROM ACETIC ACID

## Title (de)

KATALYSATOREN ZUR HERSTELLUNG VON ETHANOL AUS ESSIGSÄURE

## Title (fr)

CATALYSEURS POUR FABRIQUER DE L'ÉTHANOL À PARTIR D'ACIDE ACÉTIQUE

## Publication

**EP 2493606 A2 20120905 (EN)**

## Application

**EP 10702393 A 20100202**

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- US 2010022950 W 20100202

## Abstract (en)

[origin: WO2011056247A2] Catalysts and processes for forming catalysts for use in hydrogenating acetic acid to form ethanol. In one embodiment, the catalyst comprises a first metal, a siliceous support, and at least one metasilicate support modifier. Preferably, the first metal is selected from the group consisting of copper, iron, cobalt, nickel, ruthenium, rhodium, palladium, osmium, iridium, platinum, titanium, zinc, chromium, rhenium, molybdenum, and tungsten. In addition the catalyst may comprise a second metal preferably selected from the group consisting of copper, molybdenum, tin, chromium, iron, cobalt, vanadium, tungsten, palladium, platinum, lanthanum, cerium, manganese, ruthenium, rhenium, gold, and nickel.

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