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Gubitosa et al.

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[54] **HYDROGENATION CATALYST, AND A METHOD FOR ITS PREPARATION AND USE, IN PARTICULAR FOR HYDROGENATION AND/OR HYDROGENOLYSIS OF CARBOHYDRATES AND POLYHYDRIC ALCOHOLS**

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[75] Inventors: **Giuseppe Gubitosa**, Novara; **Bruno Casale**, Cameri, both of Italy

Primary Examiner—Anthony McFarlane
Attorney, Agent, or Firm—Bryan Cave LLP

[73] Assignee: **Montecatini Technologie S.r.l.**, Italy

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Related U.S. Application Data

[62] Division of Ser. No. 11,189, Jan. 29, 1993, Pat. No. 5,326, 912.

Foreign Application Priority Data

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[52] **U.S. Cl.** **502/184**; 502/185; 502/331; 502/339; 502/345

[58] **Field of Search** 502/184, 185, 502/330, 331

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[57] ABSTRACT

A metallic catalyst composition on an inert support, suitable in particular for hydrogenolysis reactions of higher polyhydric alcohols, characterized in that it comprises the following relative to 100 parts of the catalyst:

- a) 0.5 to 5 weight % ruthenium;
- b) 1 to 10 weight % of a metal selected from the group consisting of palladium, platinum and rhodium; and
- c) 0.5 to 2.5 weight % copper,

in which the copper content is lower than the content of the metal b).

The catalyst is used in particular for producing lower polyhydric alcohols such as ethanediol, propylene glycol, butanediol and glycerol, by means of hydrogenolysis reaction of higher polyhydric alcohols.

4 Claims, No Drawings