Amended Claims

1. A process for preparing a supported hydrogenation catalyst with increased hydrogenation activity, which comprises a hydrogenating metal and an oxide of a hydrogenating metal on an Al_2O_3-containing support material, said calcined supported hydrogenation catalyst being treated before or after the final shaping thereof and before use thereof in the hydrogenation with a base solution having a pH of > 10 at a temperature in the range from 20 to 120°C for 1 to 300 hours, and wherein an oxidic material comprising copper oxide and aluminum oxide and at least one of the oxides of iron, lanthanum, tungsten, molybdenum, titanium, zirconium, tin or manganese is provided, pulverulent metallic copper, copper flakes, pulverulent cement, graphite or a mixture thereof is added to the oxidic material and the resulting mixture is shaped to a shaped body.

2. The process according to claim 1, wherein the base solution comprises an alkali metal hydroxide or alkaline earth metal hydroxide or a mixture thereof.

3. The process according to claim 2, wherein the base solution comprises sodium hydroxide.

4. The process according to any of claims 1 to 3, wherein treatment is effected with an aqueous base solution.

5. The process according to any of claims 1 to 4, wherein the hydrogenating metal is selected from groups 8-11 of the periodic table of the chemical elements.

6. The process according to any of claims 1 to 4, wherein the hydrogenating metal is selected from Cu, Fe, Ni, Rh, Ru, Pd, Pt or mixtures thereof.

7. The process according to claim 6, wherein the hydrogenating metal comprises copper.

8. A supported hydrogenation catalyst obtainable by a process according to any of claims 1 to 7.

9. The use of a supported hydrogenation catalyst according to claim 8 for hydrogenating organic compounds having carbonyl groups.

10. The use according to claim 9, wherein the organic compound is a carboxylic acid, a carboxylic ester, a carboxylic anhydride, an aldehyde or a lactone.

11. A process for hydrogenating organic compounds having carbonyl groups over a hydrogenation catalyst, which comprises using a supported hydrogenation catalyst which is obtainable by a process according to any of claims 1 to 7.

[Scope of Claims for Patent]

[Claim 1]

A process for preparing a supported hydrogenation catalyst with increased hydrogenation activity, which comprises a hydrogenating metal and/or an oxide of a hydrogenating metal on an Al_2O_3-containing support material, said calcined supported hydrogenation catalyst being treated before or after the final shaping thereof and before use thereof in the hydrogenation with a base solution having a pH of > 10 at a temperature in the range from 20 to 120°C for 1 to 300 hours, and wherein an oxidic material comprising copper oxide and aluminum oxide and at least one of the oxides of iron, lanthanum, tungsten, molybdenum, titanium, zirconium, tin or manganese is provided, pulverulent metallic copper, copper flakes, pulverulent cement, graphite or a mixture thereof is added to the oxidic material and the resulting mixture is shaped to a shaped body.

[Claim 2]

The process according to claim 1, wherein the base solution comprises an alkali metal hydroxide or alkaline earth metal hydroxide or a mixture thereof.

[Claim 3]

The process according to claim 2, wherein the base solution comprises sodium hydroxide.

[Claim 4]

The process according to any of claims 1 to 3, wherein treatment is effected with an aqueous base solution.

[Claim 5]

The process according to any of claims 1 to 4, wherein the hydrogenating metal is selected from groups 8-11 of the periodic table of the chemical elements.

[Claim 6]

The process according to any of claims 1 to 4, wherein the hydrogenating metal is selected from Cu, Fe, Ni, Rh, Ru, Pd, Pt or mixtures thereof.

[Claim 7]

The process according to claim 6, wherein the hydrogenating metal comprises copper.

[Claim 8]

A supported hydrogenation catalyst obtainable by a process according to any of claims 1 to 7.

[Claim 9]

A process for hydrogenating organic compounds having carbonyl groups over a hydrogenation catalyst, which comprises using a supported hydrogenation catalyst which is obtainable by a process according to any of claims 1 to 7.