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(54) Title: HYDROCRACKING CATALYST COMPRISING COATED CRAKING COMPONENT PARTICLES

(57) Abstract

The invention relates to a hydrocracking catalyst comprising at least one hydrogenation metal component, and particles of a cracking component as least 50 % of the outer surface of which is coated with a layer of pre-formed inorganic oxide, which layer has a thickness in the range of 10 nm to 5 μm, commonly 10 nm to 2 μm. The cracking component is either a zeolitic cracking component, or an amorphous cracking component, or a mixture of both. The particles may be coated with oxide by contacting uncoated particles having a mean particle size in the range of 0,1 to 10 μm with an aqueous medium containing particles of the oxide to be provided as coating having a particle size in the range of 10 to 5000 nm, preferably in the range of 10 to 1000 nm, with the ratio between the oxide particle size and the mean particle size of the cracking component particles being in the range of 0,001:1 to 0,5:1. After coating, the coated particles are optionally dried and/or calcined. The coating oxide is preferably alumina or alumina-silica. The use of zeolite particles coated with pre-formed oxide in hydrocracking catalysts instead of uncoated zeolite particles results in a hydrocracking catalyst with an improved diesel selectivity. Additionally, due to the oxide coating, coated cracking component particles are easier to extrude than uncoated cracking component particles. This is especially true in the case of zeolite particles.