

Preparation of carboxylic acids by carbonylation of olefins

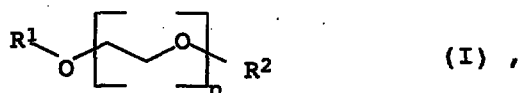
Abstract

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In a process for preparing carboxylic acids from olefins and carbon monoxide in the presence of water, use is made of a halogen-free catalyst system comprising a mixture of

- 10 a) rhodium or a rhodium compound,
- b) at least one nitrogen-containing heterocyclic compound,
- c) at least one alkali metal salt or alkaline earth metal salt
- 15 of an aliphatic C₂-C₂₀-carboxylic acid and
- d) at least one glycol ether of the formula I

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where R¹ and R² are independently C₁-C₂₀-alkyl or R³CO where R³ is hydrogen or C₁-C₂₀-alkyl, or R¹ and R² together form a C₁-C₂₀-alkylene chain, and n is from 1 to 30.

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