

Title (en)

Process for the preparation of ethylene polymers.

Title (de)

Verfahren zum Herstellen von Polymerisaten des Äthylens.

Title (fr)

Procédé de préparation de polymères d'éthylène.

Publication

**EP 0000748 A1 19790221 (DE)**

Application

**EP 78100534 A 19780728**

Priority

DE 2734909 A 19770803

Abstract (en)

The process involves polymerisation of the monomer at elevated temperature in a saturated hydrocarbon which is liquid under the process conditions and in which both the monomer and the polymer formed are soluble, by means of a chromium oxide supported catalyst which is obtained from a catalyst precursor (which is itself a silicon dioxide-based, finely particulate support which is homogeneously coated with a chromium compound) by (1) treating the catalyst precursor (if necessary with addition of a promoter) at elevated temperature with an oxygen-containing gas, and then (2) allowing carbon monoxide to act on the product obtained from step (1). The process is characterised in that the chromium oxide supported catalyst employed is prepared from the catalyst precursor by using, in both steps (1) and (2), the solid in the form of a fluidised bed which is maintained by a carrier gas stream, with the provisos that (1) in step (1) the oxygen treatment is carried out at a temperature of from 400 to 1500 DEG C for a time of at least 30 minutes, and (2) in step (2) the carbon monoxide treatment is carried out at a temperature of from 250 to 500 DEG C for a time of from 0.5 to 3 hours by means of anhydrous and oxygen-free gas which comprises nitrogen to which a total of from 100 to 1000 mol%, based on the chromium trioxide content of the product obtained from step (1), of carbon monoxide is added, distributed evenly over the total carbon monoxide treatment time.

IPC 1-7

**C08F 10/00**; **C08F 4/22**; **C08F 4/24**

IPC 8 full level

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CPC (source: EP)

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C-Set (source: EP)

1. **C08F 10/00** + **C08F 4/22**
2. **C08F 10/00** + **C08F 4/24**

Citation (search report)

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**EP 0000748 A1 19790221**; AT A559578 A 19800815; DE 2734909 A1 19790215; DK 342078 A 19790204; ES 472325 A1 19790216; FI 782362 A 19790204; IT 7825982 A0 19780721; JP S5428380 A 19790302; NO 782639 L 19790206

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