

Title (en)

Titanium trichloride compositions, preparation thereof, catalyst system containing them and polymerisation of olefins using this system.

Title (de)

Titantrichloridpräparate und deren Herstellung, Katalysatorsysteme die dieses Präparat enthalten und deren Anwendung zur Polymerisation von Olefinen.

Title (fr)

Compositions à base de trichlorure de titane, préparation de celles-ci, système catalytique les contenant et polymérisation des oléfines à l'aide de ce système.

Publication

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Application

**EP 78300283 A 19780814**

Priority

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- GB 3634177 A 19770831

Abstract (en)

A titanium trichloride composition has the formula:  $\text{TiCl}_3(\text{AlR}_x\text{X}_{3-x})_n\text{EaLb}$  where E is an ether or thioether; L is an organic phosphorus-containing Lewis Base; and a and b are each greater than 0.001 and not more than 0.50. The composition has a low surface area, typically less than  $50 \text{ m}^2/\text{g}$ . The composition can be prepared by reacting titanium tetrachloride with an organo-aluminium compound, optionally heating the reaction product, contacting the reaction product at an elevated temperature with at least one of E and L and washing the product subsequent to the contacting with E. In the composition, E is conveniently di-n-butyl ether or di-iso-amyl ether and L can be an organic phosphine, phosphine oxide, phosphite or phosphate. The composition can be used in a polymerisation catalyst to polymerise or copolymerise olefine monomers. Copolymers having an advantageous combination of low temperature brittle point and Flexural Modulus are disclosed.

IPC 1-7

**C08F 10/00**; **C07F 9/02**; **C08F 4/64**

IPC 8 full level

**C08F 4/00** (2006.01); **C07F 9/09** (2006.01); **C07F 9/141** (2006.01); **C07F 9/50** (2006.01); **C07F 9/53** (2006.01); **C08F 4/60** (2006.01); **C08F 4/64** (2006.01); **C08F 10/00** (2006.01)

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Citation (search report)

- [X] FR 2099150 A5 19720310 - MITSUI TOATSU CHEMICALS
- FR 2320308 A1 19770304 - MONTEDISON SPA [IT]
- [A] FR 2314924 A1 19770114 - ICI LTD [GB]

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