

ステミング検索辞書を使った検索結果 (例 1)

検索条件:

「ポリマー」(もしくは"polymer")の単語グループ全体

検索対象文献:

"Polymeric membrane compositions"

米国特許番号: 6,953,828

著者: Dharmarajan, et al.

(以下は検索結果の抜粋)

Claims

3. The membrane of claim 1, wherein the propylene **polymer** component comprises polypropylene selected from: propylene homopolymers; random copolymers of propylene and ethylene; impact copolymers of propylene and ethylene; reactor alloys of ethylene-propylene rubber and crystalline polypropylene; and mixtures thereof.

4. The membrane of claim 1, wherein the polypropylene **polymer** component comprises polypropylene/ethylene copolymer having a **polymerized** ethylene content of from 0.5 to 40 wt. %.

5. The membrane of claim 1, wherein the polypropylene **polymer** component comprises polypropylene/ethylene random copolymer having a **polymerized** ethylene content of from 1 to 10 wt. %.

6. The membrane of claim 1, wherein the polypropylene **polymer** component comprises polypropylene/ethylene impact copolymer having an overall **polymerized** ethylene content of from 1 to 15 wt. %.

48. The composite membrane of claim 45, wherein the polypropylene **polymer** component comprises polypropylene/ethylene copolymer having a **polymerized** ethylene content of from 0.5 to 40 wt. %.

49. The membrane of claim 45, wherein the polypropylene **polymer** component comprises polypropylene/ethylene random copolymer having a **polymerized** ethylene content of from 1 to 10 wt. %.

50. The composite membrane of claim 45, wherein the polypropylene **polymer** component comprises polypropylene/ethylene impact copolymer having a **polymerized** ethylene content of from 1 to 15 wt. %.

Description

1. FIELD OF THE INVENTION

4.1 The mVLDPE Component

The **polymer** blends and membranes of the present invention include a metallocene catalyzed very low density polyethylene (mVLDPE) **polymer**. As used herein, the terms "very low density polyethylene" **polymer** and "VLDPE" **polymer** refer to a polyethylene copolymer having a density of less than 0.916 g/cm³. As used herein, the term "polyethylene copolymer" indicates a **polymer** formed of more than 50 mol % **polymerized** ethylene units, and the remaining less than 50 mol % **polymerized** units being **polymerized** α -olefin comonomers, such as C₃₋₂₀ α -olefins or C₃₋₁₂ α -olefins. As used herein, the terms "metallocene-catalyzed VLDPE," "metallocene-produced VLDPE," or "mVLDPE" refer to a VLDPE **polymer** having the density and melt index properties described herein, and being produced in the presence of a metallocene catalyst. One skilled in the art will recognize that a metallocene-catalyzed VLDPE **polymer** has measurable properties distinguishable from a VLDPE **polymer** having the same comonomers in the same weight percentages but produced from a different process, such as a conventional Ziegler-Natta **polymerization** process.

Noncoordinating anions useful in accordance with this invention are those which are compatible, stabilize the metallocene cation in the sense of balancing its ionic charge in a +1 state, yet retain sufficient lability to permit displacement by an ethylenically or acetylenically unsaturated monomer during **polymerization**. Additionally, the anions useful in this invention will be large or bulky in the sense of sufficient molecular size to largely inhibit or prevent neutralization of the metallocene cation by Lewis bases other than the **polymerizable** monomers that may be present in the **polymerization** process. Typically the anion will have a molecular size of greater than or equal to about 4 angstroms.

In a preferred embodiment, the mVLDPE **polymer** is made using a gas-phase, metallocene-catalyzed **polymerization** process. As used herein, the term "gas phase **polymerization**" refers to **polymerization** of monomers in a fluidized bed. In this embodiment, the mVLDPE **polymer** may be made by **polymerizing** α -olefins in the presence of a metallocene catalyst under reactive conditions in a gas phase reactor having a fluidized bed and a fluidizing medium. In a specific embodiment, the mVLDPE **polymer** can be made by **polymerization** in a single reactor (as opposed to multiple reactors). As discussed in greater detail below, a variety of gas phase **polymerization** processes may be used. For example, **polymerization** may be conducted in uncondensed or "dry" mode, condensed mode, or "super-condensed mode." In a specific embodiment, the liquid in the fluidizing medium can be maintained at a level greater than 2 weight percent based on the total weight of the fluidizing medium.

(以上「〜」は省略を示す)

原文ワード数: 17,000 程度 (Word で 50 ~ 60 ページ)

“polymer”グループに属する各単語の出現回数 (文書全体)

polymer (名詞)	156 回
polymers (名詞 (複数))	16 回
copolymer (名詞)	82 回
copolymers (名詞 (複数))	41 回
homopolymer (名詞)	14 回
homopolymers (名詞 (複数))	11 回
polymerization (名詞)	39 回
polymeric (形容詞)	5 回
polymerizable (形容詞)	3 回
polymerized (形容詞; 動詞活用)	20 回
polymerizing (形容詞; 動詞活用)	2 回
polymerize or polymerise (動詞)	0 回
polymerizes or polymerises (動詞)	0 回

英語の名詞 (もしくはある名詞に相当する日本語 (句)) を 1 つ入力することにより、その単語と同じ語幹を有し、かつ意味上深い関連を持つ単語を一括して検索します。つまり、この場合は語幹 "polym" を共有している単語の中でもポリマーに直接関連する単語のみを検索します。このため、綴りの上では似ていても意味上関係のない "polymerase" (ポリメラーゼ) や "polymerous" (生物学用語で "多くの部分から成る") などは検索対象から除外されます。

また当辞書は、英単語なら名詞に限らず形容詞、副詞、および動詞から同様の検索を可能にし、またこれら 4 つの品詞が持つ全ての活用形 (名詞の複数形、形容詞の比較・最上級、動詞の三人称単数、過去形、過去および現在分詞) も検索に使用できます。

ステミング検索辞書を使った検索結果（例 2）

検索条件：

「光触媒（作用）」（もしくは”photocatalysis”）の単語グループ全体

検索対象文献：

“Process for treating architectural material”

米国特許番号：6,919,104

著者：Marzolin, et al.

（以下は検索結果の抜粋）

（以上「～～」は省略を示す）

原文ワード数：7,000 程度（Word で 20～25 ページ）

“photocatalysis”に属する各単語の出現回数（文書全体）

photocatalyst（名詞）	10 回
photocatalysis（名詞）	2 回
photocatalizer（名詞）	0 回
photocatalytic（形容詞）	31 回

Claims

1. A process for treating a permeable architectural material by impregnation, comprising:
spraying onto the architectural material having a surface to be treated, selected from the group consisting of fascia or building coatings, paving stones, architectonic concrete, tiles or any material based on a cement composition, concrete objects, terracotta, slate and stone, one or more liquid phase dispersions of at least one photocatalytic metal oxide or sulfide compound and at least one compound which promotes the adhesion of the photocatalytic compound to the architectural material, whereby, after spraying, removing the liquid phase of the dispersion from the surface of the architectural material and curing the at least one adhesion promoter spontaneously in ambient atmosphere.
2. The process according to claim 1, wherein the photocatalyst is titanium oxide in at least partially crystallized anatase form.

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### Description

#### BACKGROUND OF THE INVENTION

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Giving all these materials a "self-cleaning" function by means of photocatalytic active components thus appears to provide an at least partial response to this problem, by at the very least making it possible to spread out the cleaning operations, these active components promoting the degradation of organic species in the presence of oxygen, water and an appropriate radiation such as UV, i.e. generally under conditions of exposure to the natural ambient atmosphere.

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Mention may also be made of patent application WO 98/05601 which describes the incorporation of photocatalytic TiO<sub>2</sub> particles directly into a hydraulic binder for cement compositions to make fascia coverings, and patent application EP-0 633 064 A1 describing coatings combining photocatalytic TiO<sub>2</sub> particles and an adhesive which has little capacity for photocatalytic degradation, such as a fluoropolymer, for treating glass or metal substrates in particular.

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The properties of degradation of soiling by photocatalysis for all these treated materials were tested in the following way:

→ the measurement of the photocatalytic activity of a material consists in depositing a model soiling and assaying its disappearance in the course of an irradiation with ultraviolet rays. Since the materials treated here are opaque, the optical measurement selected is colorimetry. The model soiling is a black organic ink,

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例 1 と同様、ここでは光触媒もしくは光触媒作用に直接的に関連する単語を “photocatalysis” で検索しました。Immozuler なら語尾の “-ysis” が変化した派生語・活用形にも確実にヒットします。