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(54) Title: COATED SEPARATOR, AND PREPARATION METHOD THEREFOR AND USE THEREOF

(54) 发明名称: 一种涂覆隔膜及其制备方法和应用

(57) Abstract: The present application provides a coated separator, and a preparation method therefor and the use thereof. The coated separator comprises a substrate and a coating that coats at least one side of the substrate. Raw materials for the preparation of the coating comprise an emulsion-based adhesive, a solvent-based adhesive and inorganic particles. The average particle size of the emulsion-based adhesive is denoted as A, the average particle size of the inorganic particles is denoted as B, the average pore size of the substrate is denoted as C, the D10 particle size of the inorganic particles is denoted as D, and then A, B, C and D satisfy the following relations: C:A:B=(0.4-0.8):1:(2-9); and A+D $\geq$ 3.5C. In the present application, by means of the addition of the emulsion-based adhesive to the preparation raw materials for the coating, the water resistance of the coated separator can be improved, and the ratio of the particle size of the emulsion-based adhesive to the particle size of the inorganic particles to the pore size of the substrate can be controlled within a specific range, thereby enabling the separator to have a relatively good air permeability.

(57) 摘要: 本申请提供一种涂覆隔膜及其制备方法和应用, 所述涂覆隔膜包括基材以及涂覆于基材至少一侧的涂层, 所述涂层的制备原料包括乳液型胶粘剂、溶剂型胶粘剂和无机颗粒; 将乳液型胶粘剂的平均粒径记为A, 将无机颗粒的平均粒径记为B, 将基材的平均孔径记为C, 将无机颗粒的D10粒径记为D, A、B、C和D满足以下关系: C:A:B=(0.4-0.8):1:(2-9); A+D $\geq$ 3.5C。在本申请中, 涂层的制备原料中, 乳液型胶粘剂的加入能够提高涂覆隔膜的耐水性, 控制乳液型胶粘剂粒径、无机颗粒粒径和基材孔径的比例在特定范围内, 使得隔膜具有较好的透气性能。

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