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(54) Title: IMPROVED PROCESS FOR MANUFACTURING ZIRCONIA-TREATED TITANIUM DIOXIDE PIGMENTS

(57) Abstract: An improved process is described for manufacturing zirconia-treated titanium dioxide pigments, wherein the zirconia treatment is accomplished in the process of fluidizing a titanium dioxide filter or press cake and then drying the same, through the addition to the filter or press cake of one or more alkaline water-soluble zirconium reagents selected from ammonium zirconyl carbonate, the water-soluble ammonium zirconyl carboxylates and mixtures of these. Aqueous solutions of such zirconium reagents, in addition to being effective for imparting a zirconia surface treatment to the titanium dioxide materials, also prove to be effective fluidizing agents for forming high solids dispersions of the zirconia-treated titanium dioxide pigment materials which can be spray dried without substantial dilution and excessive energy requirements.



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