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(54) Title: STABLE NANO TITANIA SOLS AND A PROCESS FOR THEIR PRODUCTION

(57) Abstract: The present invention provides a process for producing a concentrated aqueous nano titania sol in the mild pH range (4.0 to 10.0) comprising contacting an acidic nano titania sol with a dispersant and with an alkalinizing agent, and subjecting the nano titania sol to membrane filtration until the nano titania sol contains more than 300 g TiO₂ nanoparticles/dm³. The nano titania sol may further be subjected to a coating treatment within any of the steps of the above described process. The concentrated aqueous nano titania sol of this disclosure is suitable for use in a variety of applications, including providing UV protection and photochemically degrading or inactivating contaminants.



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