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(54) Title: SYNTHESIS OF SODIUM TITANATE

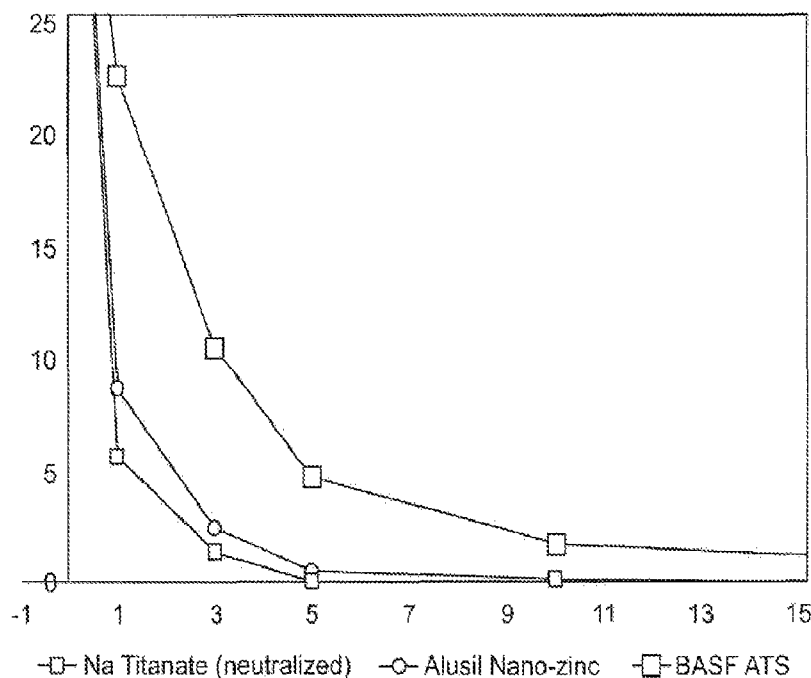


FIG. 3

[Continued on next page]



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(57) Abstract: A process for producing a sodium titanate is utilized in an ion exchange media. The sodium titanate ion exchange media can be subsequently used to remove contaminants such as metals from water in a variety of applications. The sodium titanate can be synthesized by utilizing a source of titanium that includes a nano-crystalline titanium having a mean primary crystallite diameter of about 1 nm to about 30 nm.