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- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations
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(54) Title: TITANIUM DIOXIDE SCOURING MEDIA AND METHOD OF PRODUCTION

(57) Abstract: Round and spherical titanium dioxide scouring media and a method for producing the media are disclosed. The scouring media is effective in removing titanium dioxide buildup on the walls of a titanium dioxide reaction vessel. The method consists of forming green titanium dioxide pellets in a high intensity mixer by mixing commercially available titanium dioxide dust, water and a surfactant. The high intensity mixer produces substantially round, and spherical green pellets which are subsequently sized and sintered in a kiln to form round and spherical titanium dioxide sintered pellets that are suitable as a scouring media. The high intensity mixer allows the operator to closely control the size and shape of the pellets during the forming process to produce substantially round and spherical green pellets. Because the sintered titanium dioxide pellets are substantially round and spherical in shape, they are much less abrasive to the walls of the reaction vessel. Furthermore, as the pellets themselves abrade away, they do not contaminate the titanium dioxide product, and they can even be reprocessed into round and spherical scouring media.



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