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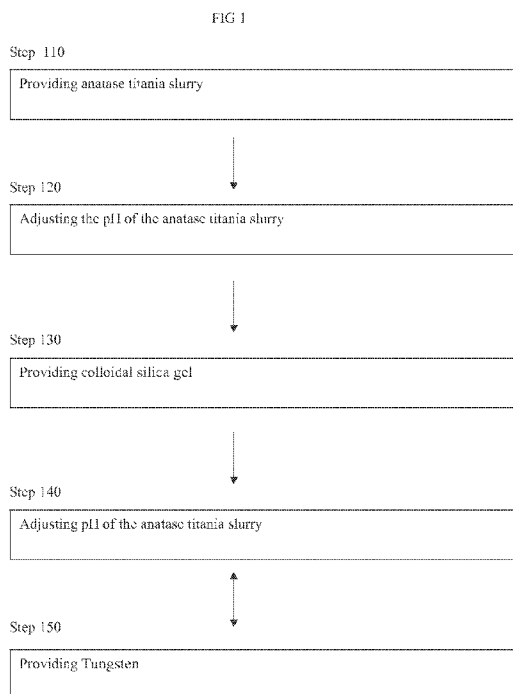
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[Continued on next page]

- (54) **Title:** CATALYST SUPPORT MATERIALS, CATALYSTS, METHODS OF MAKING THEM AND USES THEREOF



PRIOR ART

(57) **Abstract:** Catalyst support materials, catalysts, methods of making such and uses thereof are described. Methods of making catalyst support material include combining anatase titania slurry with i) a low molecular weight form of silica; and ii) a source of Mo to form a $\text{TiO}_2\text{-MoO}_3\text{-SiO}_2$ mixture. Catalyst support material include from about 86% to about 94% weight anatase titanium dioxide; from about 0.1% to about 10% weight MoO_3 ; and from about 0.1% to about 10% weight SiO_2 . Low molecular weight forms of silica include forms of silica having a volume weighted median size of less than 4 nm and average molecular weight of less than 44,000, either individually or in a combination of two or more thereof. Catalyst include such catalyst support material with from about 0.1 to about 3 % weight of V_2O_5 and optionally from about 0.01% to about 2.5% weight P.



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