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(54) Title (EN): TITANIUM OXIDE

(54) Title (FR): OXYDE DE TITANE

(54) Title (JA): 酸化チタン

(57) Abstract:

(EN): Provided is a low cost titanium oxide which has a large BET specific surface area, and which can maintain a high inclusion amount of anatase crystal phase in the crystal phase thereof, even in a high temperature environment. A titanium oxide in which the amount of anatase crystal phase included in the total crystal phase thereof is at least 95 mass%, and in which if the half value width of the peak corresponding to the anatase crystal phase in $2\theta=24.5^\circ-26.0^\circ$ under x-ray diffraction measurement is B[rad], and the BET specific surface area is $S_{BET}[m^2/g]$, then $B\#2.9\times 10^{-2}rad$, $S_{BET}\#245m^2/g$, and $B/S_{BET}\#1.07\times 10^{-4}g/m^2$.

(FR): L'invention concerne un oxyde de titane à faible coût qui a une grande surface spécifique BET, et qui peut maintenir un taux d'inclusion élevé de phase cristalline anatase dans sa phase cristalline, même dans un environnement à haute température. L'invention concerne un oxyde de titane dans lequel la quantité de phase cristalline anatase comprise dans la phase cristalline totale de celui-ci est d'au moins 95% en masse, et dans lequel si la largeur de demi-valeur du pic correspondant à la phase cristalline anatase dans $2\theta = 24,5^\circ-26,0^\circ$ sous mesure de diffraction des rayons X est B[rad], et la surface spécifique BET est $S_{BET}[m^2/g]$, alors $B \# 2,9 \times 10^{-2} rad$, $S_{BET} \# 245 m^2/g$, et $B/S_{BET} \# 1,07 \times 10^{-4} g/m^2$.

(JA): 低コストで、BET比表面積が大きく、かつ高温環境下においても結晶相中のアナターゼ結晶相の含有率を高く維持できる酸化チタンを提供する。全結晶相中のアナターゼ結晶相の含有率が95質量%以上の酸化チタンであって、X線回折測定における $2\theta=24.5^\circ\sim 26.0^\circ$ にあるアナターゼ結晶相に対応するピークの半値幅をB[rad]、BET比表面積を $S_{BET}[m^2/g]$ とすると、 $B\leq 2.9\times 10^{-2}rad$ であり、 $S_{BET}\geq 245m^2/g$ であり、かつ $B/S_{BET}\leq 1.07\times 10^{-4}g/m^2$ である酸化チタン。

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