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**(54) Title (EN):** POSITIVE ELECTRODE ACTIVE MATERIAL FOR NONAQUEOUS SECONDARY BATTERIES, AND NONAQUEOUS SECONDARY BATTERY USING SAME

**(54) Title (FR):** MATÉRIAU ACTIF D'ÉLECTRODE POSITIVE POUR BATTERIES SECONDAIRES NON AQUEUSES, ET BATTERIE SECONDAIRE NON AQUEUSE L'UTILISANT

**(54) Title (JA):** 非水系二次電池用の正極活物質、およびそれを用いた非水系二次電池

**(57) Abstract:**

**(EN):** Provided is an excellent positive electrode active material for nonaqueous secondary batteries, which exhibits cycle characteristics and rate characteristics higher than ever before. This positive electrode active material for nonaqueous secondary batteries is configured from a metal or metal compound that contains a metal element  $M^1$  which undergoes a conversion reaction and/or a reverse conversion reaction and an amorphous metal oxide of a metal element  $M^2$  ( $M^2$  is at least one metal element selected from the group consisting of V, Cr, Mo, Mn, Ti and Ni).

**(FR):** La présente invention concerne un excellent matériau actif d'électrode positive pour des batteries secondaires non aqueuses, qui présente des caractéristiques de cycle et des caractéristiques de taux plus élevées qu'auparavant. Ce matériau actif d'électrode positive pour batteries secondaires non aqueuses est configuré à partir d'un métal ou d'un composé métallique qui contient un élément métallique  $M^1$  qui subit une réaction de conversion et/ou une réaction de conversion inverse et un oxyde métallique amorphe d'un élément métallique  $M^2$  ( $M^2$  est au moins un élément métallique choisi parmi le groupe constitué de : V, Cr, Mo, Mn, Ti et Ni).

**(JA):** 従来よりも高いサイクル特性およびレート特性を発揮する優れた非水系二次電池用の正極活物質を提供する。非水系二次電池用の正極活物質は、コンバージョン反応および / または逆コンバージョン反応を示す金属元素

M<sup>1</sup>を含む金属もしくは金属化合物と、金属元素M<sup>2</sup>の非晶質金属酸化物(M<sup>2</sup>は、V、Cr、Mo、Mn、Ti、およびNiから成る群から少なくとも1つが選択された金属元素)から構成される。

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