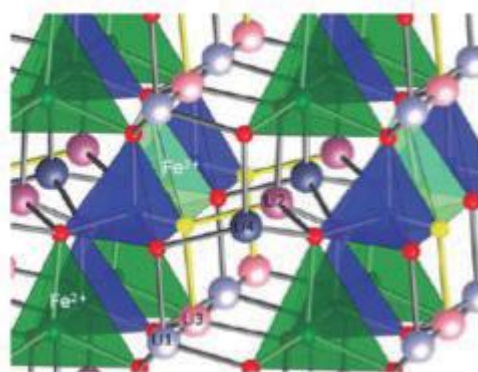


NEW HIGH CAPACITY MATERIALS BASED ON TRANSITION METALS OF OXINITRIDES

PATENT Nº: EP2813468

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Researchers at CIC energigUNE and Centre National de la Recherche Scientifique (CNRS) have found a new family of **polyanionic compounds** in which a fraction of the oxygen is replaced by nitrogen, giving rise to anionic entities such as SO_3N^{-3} , PO_3N^{-4} , $\text{PO}_2\text{N}^{2-5}$, $\text{SiO}_3\text{N}^{-5}$, and $\text{SiO}_2\text{N}^{2-6}$. When associated with a transition metal such as Fe^{+2} or Mn^{+2} , **lithium intercalation materials** with higher energy density can be obtained.



ADDED VALUE

- > High capacity
- > Higher conductivity than N-free compounds

APPLICATION OF THE TECHNOLOGY

- > High energy density storage applications (e.g. transportation)

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