

# **A Plant Protein And Modified Clay Composite**

## **Abstract**

A polymer composite comprising a clay modified with coupling agent such as an organosilane; and a plant protein matrix, wherein the coupling agent couples the modified clay to the plant protein polymeric matrix. An antimicrobial agent can also be coupled to the coupling agent. Suitable antimicrobial agents include chitosan and its derivatives, transition metals and inorganic oxides. A method of forming the polymer composite coating on a substrate, a multi-layered structure comprising said composite and a composition comprising the composite is also defined. The composite is useful in food packaging.

(No Suitable Figure)