

of substantially simultaneously catalyzing the oxidation of hydrocarbons and carbon monoxide and the reduction of nitrogen oxides. The structure of the layered catalyst composite of the present invention is designed wherein there is a first layer and a second layer. The first layer comprises a first support; at least one first palladium component and an oxygen storage component in intimate contact with the palladium component; optionally another first platinum group metal component; a zirconium component; at least one first alkaline earth metal components and at least one first rare earth metal component selected from the group consisting of lanthanum metal components and neodymium metal components. The second layer comprises a second support; at least one second palladium component; optionally another second platinum group metal component; at least one second alkaline earth metal component; at least one second rare earth component selected from the group consisting of lanthanum metal components and

neodymium metal components and a zirconium component.

5597772

**THERMALLY STABLE
RHODIUM/ALUMINA CATALYSTS**

McCabe Robert W; Usmen Rengin K; Gandhi Harendra Lathrup Village, MI, UNITED STATES
assigned to Ford Motor Company

The invention relates to a method of making a rhodium containing phase of a catalyst system useful to treat the exhaust gases of an internal combustion engine. The method comprises hydrothermally pre-treating the alumina prior to its impregnation with a preferably low loading of rhodium. Preferably the alumina is alpha-alumina.