OAK RIDGE NATIONAL LABORATORY
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Ternary Metal Oxide Catalyst with Separate CO and Hydrocarbon Oxidation Function

Disclosure Number

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Technology Summary

A ternary mixed metal oxide catalyst controls emissions from combustion processes. It exhibits low temperature oxidation of pollutant species without the use of expensive platinum group metals. It exhibits a unique lack of inhibition between the oxidation processes of different pollutant species making it well suited for pollutant control in complex mixed gas streams. In particular, the oxidation of CO is not inhibited by the presence of hydrocarbons in the gas stream making this catalyst attractive for automotive applications and other combustion emission control applications. This catalyst could lead to new catalyst products that perform significantly better than the current state-of-the-art and potentially cost much less as well.

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