Title (en)

CATALYTIC TRAP WITH POTASSIUM COMPONENT AND METHOD OF USING THE SAME

Title (de)

KALIUM ENTHALTENDE KATALYTISCHE FALLE UND VERFAHREN ZU IHRER HERSTELLUNG UND IHRER VERWENDUNG

Title (fr)

PIEGE CATALYTIQUE A COMPOSANT AU POTASSIUM ET PROCEDE D'UTILISATION

Publication

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Application

EP 00955812 A 20000822

Priority

- US 0022968 W 20000822
- US 37881399 A 19990823

Abstract (en)

[origin: WO0114046A1] A catalytic trap effective for conversion of NOx in an exhaust gas stream is inert to high-temperature reaction with basic oxygenated compounds of lithium, sodium or potassium. The catalytic trap may be substantially free of silica components and may include a catalytic trap material which contains a refractory metal oxide support, e.g., alumina, having dispersed thereon a catalytic component, such as a platinum group metal catalytic component, and an NOx sorbent comprised of one or more of the basic oxygenated compounds. The catalytic trap material is coated onto a suitable carrier member, such as one made from stainless steel, titanium, alumina, titania, zirconia or silica-leached cordierite. A method of treating an NOx-containing gas stream involves maintaining the gas stream in alternating periods of (1) lean and (2) rich or stoichiometric conditions and contacting the gas stream with the catalytic trap under conditions in which NOx is adsorbed during periods of lean operation and released and reduced to nitrogen during periods of rich operation.

IPC 8 full level

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