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(12) **United States Patent**  
**Patchett et al.**

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(54) **CATALYZED SCR FILTER AND EMISSION TREATMENT SYSTEM**

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(Continued)

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(58) **Field of Classification Search**  
CPC ... F01N 2370/04; F01N 3/2066; F01N 3/106; F01N 13/009; B01D 2255/9205; B01D 5/009; B01D 5/0054  
USPC ..... 422/177, 180, 472; 502/74, 77, 79; 60/286, 297, 301  
See application file for complete search history.

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(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

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(57) **ABSTRACT**

Provided is a catalyst article for simultaneously remediating the nitrogen oxides (NOx), particulate matter, and gaseous hydrocarbons present in diesel engine exhaust streams. The catalyst article has a soot filter coated with a material effective in the Selective Catalytic Reduction (SCR) of NOx by a reductant, e.g., ammonia.

**27 Claims, 7 Drawing Sheets**

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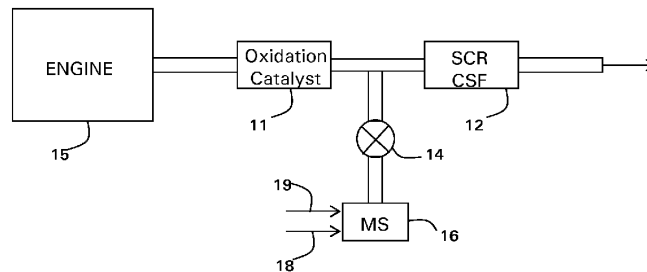
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**Related U.S. Application Data**

(60) Continuation of application No. 13/274,635, filed on Oct. 17, 2011, now Pat. No. 8,899,023, which is a continuation of application No. 11/676,798, filed on Feb. 20, 2007, which is a division of application No. 10/634,659, filed on Aug. 5, 2003, now Pat. No. 7,229,597.

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(52) **U.S. Cl.**  
CPC ..... **F01N 3/2892** (2013.01); **Y10T 29/49345**



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Figure 1A

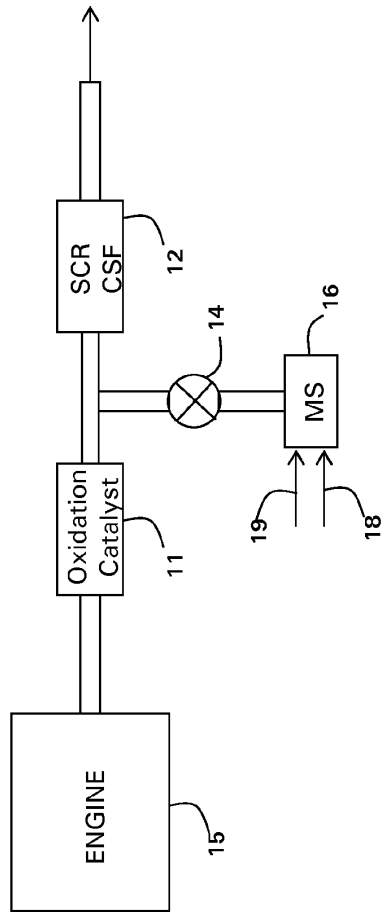
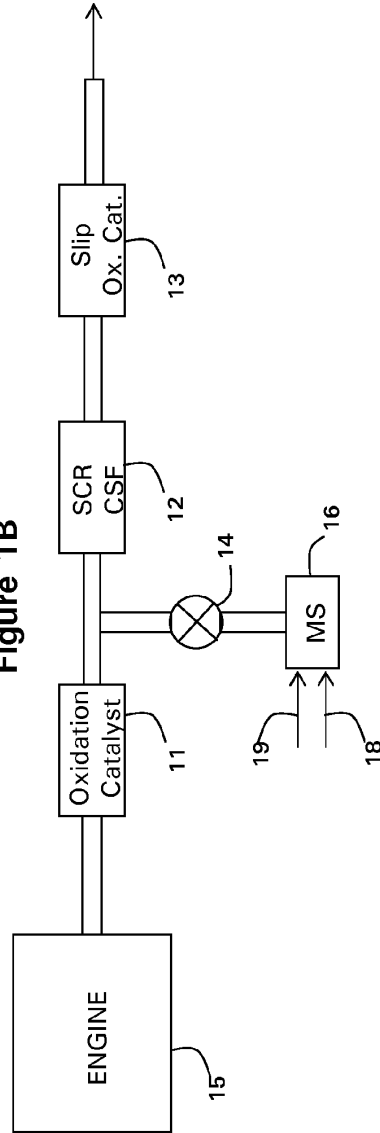


Figure 1B



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