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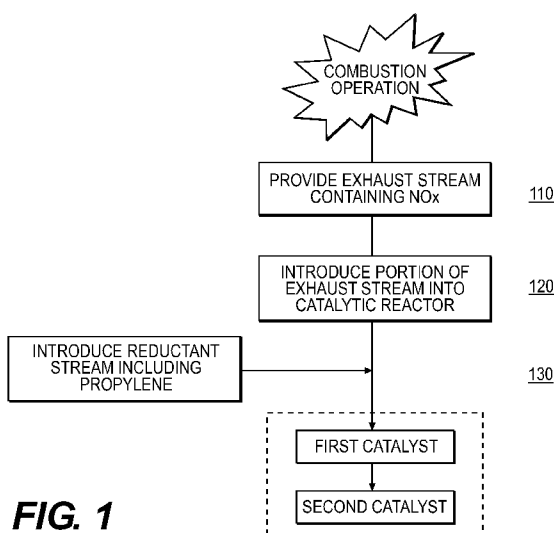
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(54) **Title:** CATALYTIC REDUCTION OF NOX WITH HIGH ACTIVITY CATALYSTS WITH PROPYLENE REDUCTANT

**FIG. 1**

(57) **Abstract:** Methods and systems are provided for selective catalytic reduction of NO_x with a low molecular low molecular weight hydrocarbon, e.g., propylene, as a reductant using a catalyst system including two catalysts. An exhaust stream containing an amount of NO_x from a combustion operation is provided. A portion of the exhaust stream and a reductant stream including a low molecular weight hydrocarbon is introduced to a first catalytic reactor, which comprises a first catalyst including alumina loaded with silver. The NO_x-reduced exhaust stream from the first catalyst is then directed to a second catalyst including zirconia loaded with at least one metal.

