Solid Ammonium SCR System

Technology Overview

- SCR system uses the pyrolysis phenomenon of the solid ammonium at low temperature about 60 ~ 120 ℃ to ammonia, and uses it as a reducing agent of nitrogen oxides emitted from internal combustion engines.

Core Technologies

- Using a low cost of reducing agent (ammonium carbonate)
- Small installation space
- High NOx reduction efficiency at a low temperature

Application Areas and Advantages

- After-treatment system of automotive, marine, agricultural and construction machinery

Accomplishments

- SAE World Congress, “A Study on the Solid Ammonium SCR System for Control of Diesel NOx Emissions”, SAE paper No. 2014-01-1535
- Patent Registration
  - NOx purification system using a selective reduction catalyst and the solid salt (Patent registration number KR 10-1185413)
  - Harmful emissions purification systems using solid urea and selective catalytic reduction (Patent registration number KR 10-0924591)
  - Automotive NOx purification device using the solid urea and the selective reduction catalyst and Solid urea reactor (Application Number KR 10-2008-0111966, Registration number KR 10-0999571)