

ABSTRACT

DEVICE AND METHOD FOR CONTROLLING AMMONIA ESCAPE IN AMMONIA-BASED DECARBONIZATION SYSTEM

Apparatus and methods for controlling ammonia escape in an ammonia-based decarbonization system, wherein ammonia may be used as the desulfurization and decarbonization agent, the gas may first enter the desulfurization device for desulfurization to produce ammonium sulfate fertilizer, and the desulfurized gas may enter the decarbonization device to remove carbon dioxide in the gas, and may produce ammonium bicarbonate fertilizer. The decarbonized gas may include free ammonia, and the free ammonia in the gas may be absorbed with the acidic ammonium sulfate solution and acidic water washing liquid of ammonia-based desulfurization.

[Figure 1]