

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

(10) **Patent No.:** **US 7,611,903 B2**
(45) **Date of Patent:** **Nov. 3, 2009**

(54) **SYSTEM FOR TRAPPING AND STORING GASES FOR SUBSEQUENT CHEMICAL REDUCTION TO SOLIDS**

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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 1290 days.

(21) Appl. No.: **10/241,301**

(22) Filed: **Sep. 11, 2002**

(65) **Prior Publication Data**

US 2004/0047766 A1 Mar. 11, 2004

(51) **Int. Cl.**
G01N 33/00 (2006.01)

(52) **U.S. Cl.** **436/177**; 422/50; 422/55; 422/58; 422/83; 422/88; 422/99; 422/101; 422/102; 422/103; 436/83; 436/81; 436/137; 436/145

(58) **Field of Classification Search** 422/50, 422/55, 58, 83, 86, 88, 99, 101, 102, 103; 436/83, 81, 137, 145, 146, 177
See application file for complete search history.

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(57) **ABSTRACT**

A system for quantitatively reducing oxide gases. A pre-selected amount of zinc is provided in a vial. A tube is provided in the vial. The zinc and the tube are separated. A pre-selected amount of a catalyst is provided in the tube. Oxide gases are injected into the vial. The vial, tube, zinc, catalyst, and the oxide gases are cryogenically cooled. At least a portion of the vial, tube, zinc, catalyst, and oxide gases are heated.

18 Claims, 4 Drawing Sheets

