

Sulfur oxide remover

create practical materials from unutilized aluminum dross with simple processing to develop new applications.

Overview

Although demand for aluminum is expected to grow globally and production is expected to expand, the aluminum production process inevitably generates a large amount of a by-product called dross. From the viewpoint of efficient utilization of aluminum resources, dross is utilized as a secondary material for steel, but the development of new applications of dross is eagerly anticipated due to the increase of dross with poor quality for steel and the reduction of demand for steel secondary materials.

Focusing on various properties of aluminum dross, the present invention has found a new application for unutilized aluminum dross by using materials processed by a simple processing method. Specifically, the application as a sulfur oxide removal material is provided. The promotion of the use of unutilized aluminum dross is expected to contribute to the realization of a sustainable society by simultaneously solving aluminum industrial by-product recycling and toxic gas removal.

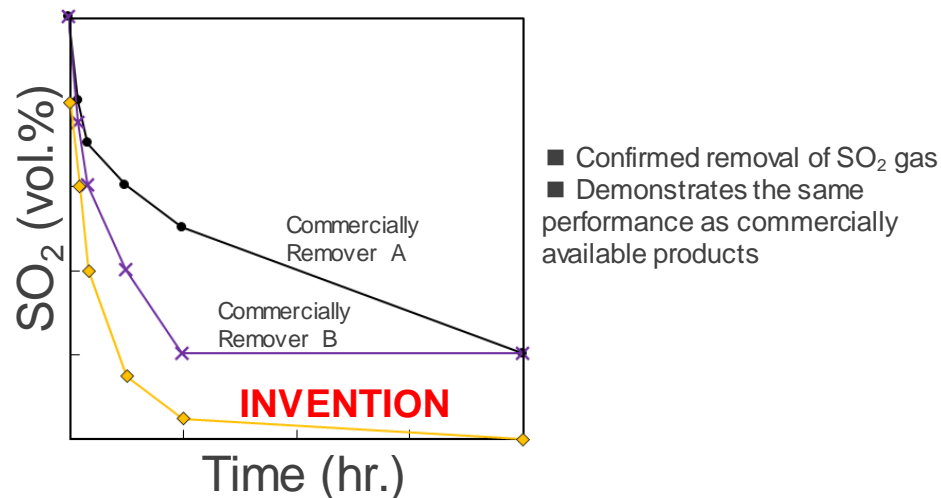
Product Application

- Sulfur oxide remover
- Hydrogen sulfide remover

IP Data

IP No. : PCT/JP2023/004620
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 Admin No. : T22-225

Features・Outstandings



Related Works

- [1] CHUBACHI Masaomi, HIRAKI Takehito et al. "Removal of hydrogen sulfide in the gas phase by the products of hydro-processed aluminum dross" The 32nd Annual Conference of Japan Society of Material Cycles and Waste Management pp.165-166 (2021)
 [2] HIRAKI Takehito et al. "Toward Sustainable Recycling of Aluminum Dross", Aluminum, 30(116), pp.7-10 (2023)

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