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De-Zincing Zinc-Coated Metals

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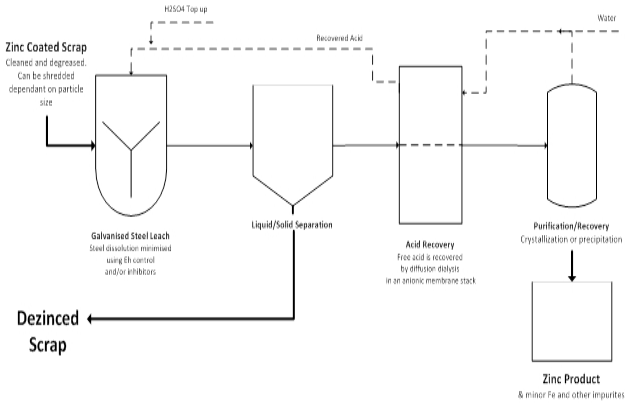
Summary: An electrochemical method to dezinc zinc-coated metals

Description: A process has been developed to dezinc zinc-coated metals. An electrochemical-based technique has been developed to selectively remove the zinc coating from the substrate metal. Novel hydrometallurgical-methods are subsequently employed for reagent recovery. A closed loop flowsheet was utilized in order to accomplish near-zero discharge from the process. The process produces a dezinced metal-scrap (typically steel) and a sellable zinc product.

Main Advantages of this Invention

- Does away with the current practice of fuming zinc off and creating a waste stream
- Zinc can be sold after recovery
- Zinc-coated scrap is cheaper than the currently used black scrap



Potential Areas of Application

- Using recovered zinc as a micro-nutrient for plants and animals
- Front end of iron foundry operations

ID number: 14012

Intellectual Property Status: US utility patent pending (application #14/631,527)

Opportunity: We are seeking an exclusive or non-exclusive licensee for marketing, manufacturing, and sale of this technology.

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