

Title (en)

PROCESS, METHOD, AND SYSTEM FOR REMOVING HEAVY METALS FROM FLUIDS

Title (de)

PROZESS, VERFAHREN UND SYSTEM ZUR ENTFERNUNG VON SCHWERMETALLEN AUS FLUIDEN

Title (fr)

PROCESSUS, PROCÉDÉ ET SYSTÈME D'ÉLIMINATION DE MÉTAUX LOURDS PRÉSENTS DANS DES FLUIDES

Publication

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Application

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- US 95017010 A 20101119
- US 95063710 A 20101119
- US 2011061035 W 20111116

Abstract (en)

[origin: WO2012068277A2] Trace amount levels of heavy metals such as mercury, arsenic, etc., in crude oil are reduced by contacting the crude oil with an oxidizing agent, extracting heavy metals into a water phase for subsequent separation from the crude oil. In one embodiment, the oxidizing agent is selected from the group of hydroperoxides, organic peroxides, inorganic peracids and salts thereof, organic peracids and salts thereof, halogens such as iodine (I₂), bromine (Br₂), and ozone. In another embodiment, at least a complexing agent selected from the group of metal halides and/or sulfur compounds can be added to facilitate the removal of heavy metals from crude oil by forming soluble heavy metal complexes in the water phase.

IPC 8 full level

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Citation (search report)

- [X] US 2003075484 A1 20030424 - SAKAI TSUNENORI [JP], et al
- [X] US 6268543 B1 20010731 - SAKAI TSUNENORI [JP], et al
- [A] US 2010210889 A1 20100819 - HAYS JOHN M [US], et al
- See references of WO 2012068277A2

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CN108659947A

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