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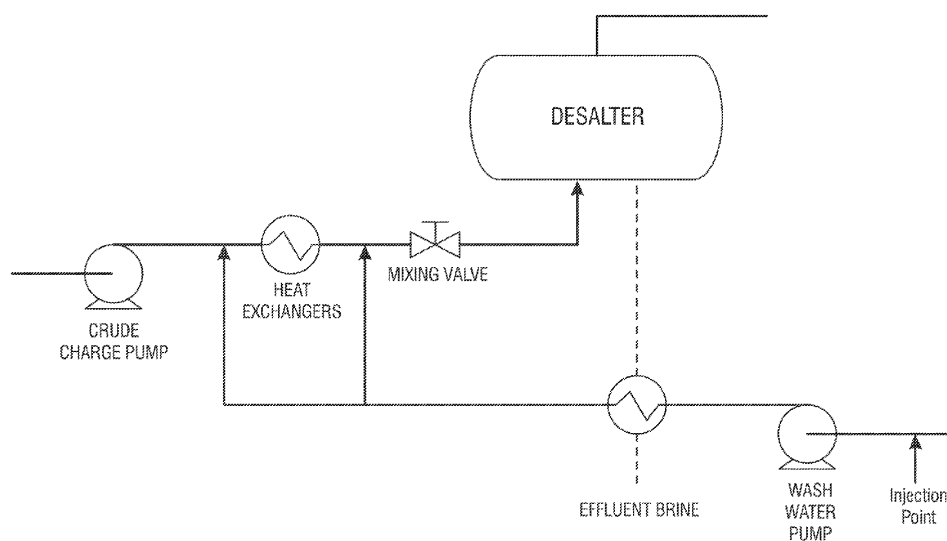
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(54) Title: USE OF PEROXYACIDS/HYDROGEN PEROXIDE FOR REMOVAL OF METAL COMPONENTS FROM PETROLE-
UM AND HYDROCARBON STREAMS FOR DOWNSTREAM APPLICATIONS



Single Stage Desalter

FIG. 1

(57) Abstract: Methods for the use of peroxyacid for enhancing downstream processes through the enhanced removal of fine particulates from petroleum oils and refinery feedstocks and/or streams are disclosed. The methods beneficially minimize fouling and improve waste water quality. Methods for mitigating heavy metal concentrations in petroleum oil and for preventing solid loading in various streams resulting from use of a metal based H₂S scavenger, aluminum and/or zinc salts, or other commonly applied metal-based additives are also disclosed. In addition, methods for enhancing coke quality by the contaminant removal, reducing bacteria in slop oil and crude tanks, as well as reducing downstream catalyst poisoning and prolonging catalyst lifetimes are also disclosed. The compositions for use in the methods are provided.

[Continued on next page]

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