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(54) Title: EMULSIFICATION OF HYDROCARBON GAS OILS TO INCREASE EFFICACY OF WATER BASED HYDROGEN SULFIDE SCAVENGERS

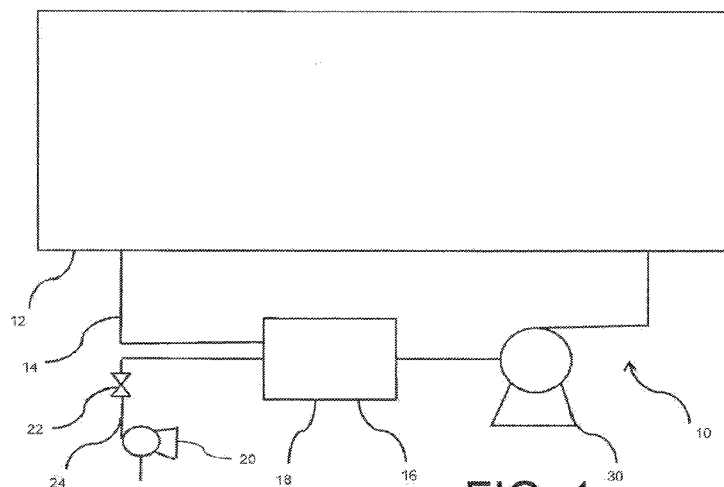


FIG. 1

(57) Abstract: A hydrogen sulfide scavenging process for heavy oil that reduces hydrogen sulfide while minimizing corrosion to processing equipment. The method includes the steps of adding an aqueous-based scavenger containing one or more aldehydes, such as glyoxal, to the heavy oil using a static mixer injection system and creating an aqueous-based scavenger/heavy oil emulsion using a high shear/high velocity pump. The aqueous-based scavenger may be added in a scavenger addition branch, with the emulsion being formed in the addition branch and then returned to the processing equipment.