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(54) Title: AN EFFECTIVE NOVEL POLYMERIC ADDITIVE FOR INHIBITING NAPHTHENIC ACID CORROSION AND METHOD OF USING THE SAME

(57) Abstract: The present invention relates to the field of inhibition of metal corrosion in hot acidic hydrocarbons, wherein acidity is derived from presence of naphthenic acid. More particularly, it relates to a polymeric additive for inhibiting high temperature naphthenic acid corrosion, wherein said polymeric additive is polymeric phosphate ester of polyisobutylene succinate ester or oxide derivative of polymeric phosphate ester of polyisobutylene succinate ester. A polymeric phosphate ester of polyisobutylene succinate ester which is capable of acting as naphthenic acid corrosion inhibitor by inhibiting naphthenic acid corrosion in crude oil/feedstock/hydrocarbon streams containing naphthenic acid, and demonstrating higher thermal stability at elevated temperature varying from about 200°C to about 400°C [about 400°F to about 750°F] is disclosed



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