## FEDERAL SERVICE FOR INTELLECTUAL PROPERTY

## (12) ABSTRACT OF INVENTION

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## (54) METHOD OF REGENERATING ALKANOLAMINES WHEN PURIFYING HYDROCARBON GASES FROM HYDROGEN SULPHIDE

(57) Abstract:

FIELD: oil and gas industry.

SUBSTANCE: invention is intended for oil, gas and chemical industry, relates to regeneration of water solutions of alkanolamines at cleaning of hydrocarbon gases from hydrogen sulphide. Method of regenerating aqueous solutions of alkanolamines (monoethanolamine, diethanol amine, methyldiethanolamine, etc.) in cleaning hydrocarbon gases from hydrogen sulphide involves liquid-phase oxidation of hydrogen sulphide absorbed by alkanolamines in the presence of a hydrocarbon solvent. Solvent used is a gasoline, or kerosene, or diesel fraction. Catalyst used is a

heterogeneous catalyst for oxidation sulfur compounds on a polypropylene carrier KSM-X, which includes cobalt dichlorophthalocyanine and variable-valence metal oxides. Hydrogen sulphide during oxidative regeneration of alkanolamines is converted to elemental sulfur.

EFFECT: invention enables regeneration of aqueous solutions of hydrogen sulphide-containing alkanolamines at lower temperatures with formation of harmless elemental sulfur.

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