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- 00626 GAS PURIFICATION (GAS SCRUBBING) FROM THE APPARATUS STANDPOINT. Matthias, B.A. Chem. Ztg.; 66: 135-7(1942).
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- 00897 REMOVAL OF HYDROGEN SULFIDE FROM INDUSTRIAL GASES. Reeve, L. (to United Steel Companies Ltd.). British Patent 719,056. 24 Nov 1954.
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- 00914 PREPARATION OF METALLURGIC COKE BY DESULFURIZATION OF HUNGARIAN BITUMINOUS COALS. Haidegger, E. (Univ. Tech. Sci., Budapest). *Magy. Kem. Foly.*; 61: 19-23(1955).
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- 00917 MODERN PRACTICES IN GAS PURIFICATION AND HYDROCARBON RECOVERY. Brueckner, H. *Gas, Wasser, Waerme*; 9: 203-11(1955).
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- 00920 REMOVAL OF SULFUR COMPOUNDS FROM GASES BY OXIDATION OVER ACTIVATED CARBON. Zelt'venskii, Ya.D. Geterogenyi Kataliz v Khim. Prom. (Moscow: Gosudarst. Nauch.-Tekh. Izdatel. Khim. Lit.) Sbornik; 1955: 399-405(1955).
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- 00922 REMOVING SULFUR FROM INDUSTRIAL GASES CONTAINING CARBON DIOXIDE. Ema, G.; Murata, M. (to Beppu Chemical Industries Co.). Japanese Patent 436. 27 Jan 1955.
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- 00926 SEPARATION OF CARBON DIOXIDE AND HYDROGEN SULFIDE FROM GAS MIXTURES. Benson, H.E.; Field, J.H. British Patent 725,000. 2 Mar 1955.
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- 00927 SULFUR REMOVAL FROM INDUSTRIAL GASES. Grosskinsky, O.; Huck, G.; Klempf, W. (to Bergwerksverband zur Verwertung von Schutzrechten der Kohlentechnik GmbH). German(FRG) Patent 928,486. 2 Jun 1955.
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- 00928 REGENERATION OF DESULFURIZING SOLUTIONS FOR GASES. Nogami, K. (to Mitsubishi Chemical Industries Co.). Japanese Patent 4332. 24 Jun 1955.
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- 00929 DESULFURIZATION OF TOWN GAS. Pani, P. Belgian Patent 539,004. 30 Jun 1955.
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- 00930 WASHING OUT CARBON DIOXIDE AND HYDROGEN SULFIDE FROM RAW GASES. Weber, R. (to Gesellschaft fuer Linde's Eismaschinen). German(FRG) Patent 929,808. 4 Jul 1955.
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- 00931 REMOVAL OF SULFUR AND HYDROGEN SULFIDE FROM GASES. Hogg, H.; Engel, W.F. (to N. V. de Bataafsche Petroleum Maatschappij). British Patent 733,004. 6 Jul 1955.
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- 00932 REMOVAL OF ACIDIC CONSTITUENTS FROM GASES. Karl, A. (to Heinrich Koppers GmbH). German(FRG) Patent 929,986. 7 Jul 1955.
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- 00933 REMOVAL OF HYDROGEN SULFIDE AND CARBON DIOXIDE FROM HYDROCARBON GASES. Blohm, C.L.; Riesenfeld, F.C. (to Fluor Corp. Ltd.). US Patent 2,712,978. 12 Jul 1955.
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- 00934 REMOVAL OF H_2S FROM COKE-OVEN GAS BY A PRESSURE-RECIRCULATING METHOD. Klempf, W.; Huck, G. Glueckauf; 91: 215-20(Aug 1955).
HYDROGEN SULFIDES; COAL GAS; DESULFURIZATION; SULFUR; REMOVAL; WASHING; REGENERATION; PILOT PLANTS; CARBON DIOXIDE; HYDROCYANIC ACID
- 00935 WASHING OF HYDROGEN SULFIDE FROM COAL-DISTILLATION GASES WITH AMMONIACAL SOLUTIONS. Leithe, F. (to Dr. C. Otto and Co., GmbH). German(FRG) Patent 931,190. 4 Aug 1955.
Washing with NH_3 solution. HYDROGEN SULFIDES; SOLUTIONS; AMMONIA; WASHING; COAL GAS; DESULFURIZATION; REMOVAL
- 00936 REMOVAL OF SULFUR FROM GASES. Roelen, O.; Rottig, W.; Hanisch, F. (to Ruhrchemie). German(FRG) Patent 932,032. 22 Aug 1955.
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00937 REMOVAL OF HYDROGEN SULFIDE FROM FUEL GASES. Birks, F.M. (to North Thames Gas Board). British Patent 735,467. 24 Aug 1955.

Treatment with Fe oxide. HYDROGEN SULFIDES; FUEL GAS; IRON OXIDES; CONTAINERS; CYLINDERS; REGENERATION; CATALYSTS; OXIDATION; SULFUR; REMOVAL; DESULFURIZATION

00938 DESULFURIZATION OF LGW-TEMPERATURE CARBONIZATION CHART. Gorin, E.; Zielke, C.W. (to Pittsburgh Consolidation Coal Co.). US Patent 2,717,863. 13 Sep 1955.

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00939 HYDROGEN SULFIDE REMOVAL FROM GASES. (to Gastechnik GmbH). British Patent 740,662. 16 Nov 1955.

Process description using two towers. HYDROGEN SULFIDES; REMOVAL; GASES; DESULFURIZATION

00940 REMOVAL OF CARBON DIOXIDE AND HYDROGEN SULFIDE FROM GASES. Baumann, F. German (GDR) Patent 10,538. 21 Nov 1955.

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00941 RECOVERY OF USEFUL SUBSTANCES AND DESULFURIZATION OF GASES. Paschke, E.; Jaenicke, M. German (GDR) Patent 10,751. 22 Nov 1955.

DESULFURIZATION; GASOLINE; HYDROGEN SULFIDES; REMOVAL; ACTIVATED CARBON; REGENERATION

00942 DESULFURIZING COAL. McKinley, J.B.; Henke, A.M. (to Gulf Research and Development Co.). US Patent 2,726,148. 6 Dec 1955.

At 300-500 psi and 300-350°. COAL; DESULFURIZATION; SULFUR; ANTHRACITE; HYDROGEN; MEDIUM PRESSURE; HIGH TEMPERATURE; BITUMINOUS COAL; PYRITES; REMOVAL

00943 REMOVAL OF SULFUR COMPOUNDS FROM GASES. Karl, A. (to Heinrich Koppers GmbH). German (FRG) Patent 936,651. 15 Dec 1955.

Use of reaction products of isocyclic monohydroxy compounds with alkali metal salts of peroxydisulfuric acid. SULFUR COMPOUNDS; REMOVAL; GASES; DESULFURIZATION

00944 GAS PURIFICATION. Carter, C.F.; Gwynn, B.H. (to Gulf Research and Development Co.). US Patent 2,728,792. 27 Dec 1955.

Reaction of synthesis gas with olefin in presence of Co catalysts. SYNTHESIS GAS; PURIFICATION; CARBON MONOXIDE; HYDROGEN; ALKENES; ALKYLHYDRES; COPPER; IRON; CARBOXYLS; IRON COMPOUNDS

00945 REMOVAL OF HYDROGEN SULFIDE FROM GAS MIXTURES. Giannarco, G. (to Vetrococo Società per Azioni). Italian Patent 537,563. 29 Dec 1955.

Desulfurization of coke-oven gas with triethanolamine solution containing As₂S₃. COAL GAS; DESULFURIZATION; REMOVAL; HYDROGEN SULFIDES; SOLUTIONS; AMINES; ARSENIC SULFIDES; REGENERATION

00946 REMOVAL OF HYDROGEN SULFIDE FROM GAS MIXTURES. Giannarco, G. (to Vetrococo Società per Azioni). Italian Patent 537,564. 29 Dec 1955.

Absorption solution contains inorganic or organic alkaline As₂O₃. GASES; DESULFURIZATION; REMOVAL; HYDROGEN SULFIDES; ABSORPTION; ARSENIC

OXIDES; SODIUM CARBONATES; SODIUM OXIDES

00947 DRY PURIFICATION. Porter, S.C. Gas World; 143: 528(1956).

Desulfurization of fuel gases by means of Fe oxide; review. HYDROGEN SULFIDES; REMOVAL; FUEL GAS; DESULFURIZATION; REVIEWS; IRON OXIDES

00948 ADSORPTION PURIFICATION OF COKE GAS FROM ORGANIC SULFUR COMPOUNDS AND HEAVY HYDROCARBONS. II. INVESTIGATION OF ADSORPTION METHODS OF PURIFICATION BY USING INDUSTRIAL COKE GAS. Zel'vinskii, Y.A.; Gruzintseva, A.N. Trudy Gosudarst. Nauch.-Issledovatel. i Proekt. Inst. Azotnoi Proz.; 1956: No. 5, 193-210(1956).

Use of activated carbon as absorbing agent. COAL GAS; PURIFICATION; DESULFURIZATION; REMOVAL; ORGANIC SULFUR COMPOUNDS; HYDROCARBONS; ABSORPTION; ACTIVATED CARBON

00949 PLANT EXPERIMENTS ON THE PURIFICATION OF COKE GAS FROM HYDROGEN SULFIDE. Arsen'ev, B.V.; Murakhovskii, N.V. Soobshcheniya Gosudarst. Soyuz. Inst. Proekt. Predpriyatii Koksokhim. Prom.; 1956: No. 17, 82-7(1956).

Using the As-soda method. COAL GAS; DESULFURIZATION; REMOVAL; HYDROGEN SULFIDES; ARSENIC; SODIUM CARBONATES

00950 DESULFURIZATION OF COKE. Lovrecek, I.; Bauman, E. (Univ. Zagreb, Yugoslavia). Kemija u Industriji (Zagreb); 5: 61-3(1956).

Laboratory procedure. DESULFURIZATION; COKE; EQUIPMENT; SULFUR; REMOVAL

00951 PEROX PLANT FOR REMOVAL OF HYDROGEN SULFIDE FROM COKE-OVEN GAS. Brommer, H.; Luhr, W. Stahl Eisen; 76: 402-6(1956).

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00952 REFINING OF DIESEL FUEL BY CATALYTIC HYDROGENATION. Schmelting, F. (Esso-Refinery, Hamburg-Harburg, Ger.). Erdoel Kohle, Erdgas, Petrochem.; 9: 450-2(1956).

Removal of S compounds by catalytic hydrogenation. DIESEL FUELS; HYDROGENATION; CATALYSIS; REFINING; SULFUR COMPOUNDS; REMOVAL

00953 PURIFICATION OF SYNTHESIS GAS. REMOVAL OF DUST, CARBON DIOXIDE, AND SULFUR COMPOUNDS. Wainwright, H.W.; Kane, L.J.; Wilson, M.W.; Shale, C.C.; Ratway, J. (U. S. Bur. of Mines, Morgantown, WV). Ind. Eng. Chem.; 48: 1123-33(1956).

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00954 PURIFICATION OF GASES OBTAINED FROM ESTONIAN BITUMINOUS SCHIST. Faudsapp, K.T.; Aarna, A.Y. Tr. Tallin. Politekh. Inst., Ser. A; 1956: No. 73, 160-78(1956).

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00955 TWO-STAGE REMOVAL OF HYDROGEN SULFIDE FROM COKE OVEN GAS BY ARSENIUS OXIDE-SODA ASH METHOD. Prokopenko, N.A. (Coke and Gas Works, Moscow). Soobshcheniya Gosudarst. Soyuz. Inst. Proekt. Predpriyatii Koksokhim. Prom.; 1956: No. 17, 100-14(1956).

COAL GAS; DESULFURIZATION; REMOVAL; HYDROGEN SULFIDES; SCRUBBING; ARSENIC OXIDES; SODIUM CARBONATES

- 00956 PURIFYING GASES OF SULFUR BY USING WASTE PRODUCTS FROM ACETYLENE MANUFACTURE. Gol'dinov, L.I. Gazov. Prom.; No. 4, 11-12(1956).
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- 01022 PURIFICATION OF TOWN GAS BY IRON OXIDE. Davies, R.G. (Gas and Fuel Corp. of Victoria, West Melbourne). Mining Geol. J. Victoria; 6: No. 2, 33-7(1957).
TOWN GAS; IRON OXIDES; PURIFICATION
- 01023 GAS PURIFICATION. Pauling, H. British Patent 765,673. 9 Jan 1957.
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- 01024 PURIFICATION OF GAS. Guinot, H.M. (to Ateliers Pingris and Mollet-Fontaine Reunis). French Patent 1,130,145. 31 Jan 1957.
Removal of H_2S and CO_2 from synthesis, cracking, or natural gas by contact with aqueous K_2HPO_4 under pressure. HYDROGEN SULFIDES; CARBON DIOXIDE; REMOVAL; POTASSIUM PHOSPHATES; REGENERATION; AQUEOUS SOLUTIONS; GASES; PURIFICATION; DESULFURIZATION
- 01025 SEPARATION OF SULFUR DISPERSED IN AQUEOUS SOLUTIONS OF OTHER SUBSTANCES. Guinot, H.M. (to Societe anon. Ateliers Pingris and Mollet-Fontaine Reunis). French Patent 1,130,266. 4 Feb 1957.
SULFUR; REMOVAL; SCRUBBING; SOLUTIONS; CENTRIFUGATION; ORGANIC SOLVENTS; ORGANIC CHLORINE COMPOUNDS; AROMATICS; HYDROCARBONS; REGENERATION
- 01026 GAS PURIFICATION. Bloch, H.S.; Mammen, H.E. (to Universal Oil Products Co.). US Patent 2,781,863. 19 Feb 1957.
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- 01027 SEPARATION OF SULFUR AND AMMONIA FROM HOT GASES. Bahr, J. (to Elfriede E. Bahr). German(FRG) Patent 959,125. 28 Feb 1957.
Coke-oven gas; gas cooled and washed with ammoniacal solution to absorb H_2S and HCN; gas scrubbed to remove NH_3 . SULFUR; AMMONIA; REMOVAL; COAL GAS; SCRUBBING; PURIFICATION; WASHING; DESULFURIZATION
- 01028 SODIUM PHOSPHATE IN HYDROGEN SULFIDE REMOVAL FROM GASES, WITH AN ALKALINE SUSPENSION OF IRON OXIDE. Hartley, W. (to Humphreys and Glasgow Ltd.). British Patent 879,112. 4 Mar 1957.
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- 01029 CYCLIC ADSORPTION PROCESS FOR REMOVING

- HYDROGEN SULFIDE FROM NATURAL GAS. Miller, E.B. (to Jefferson Lake Sulphur Co.). US Patent 2,784,804. 12 Mar 1957.
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- 01030 OXIDATION OF HYDROGEN SULFIDE TO SULFUR DIOXIDE. Marsh, J.D.F.; Newling, W.B.S. (to Gas Council). British Patent 769,996. 13 Mar 1957.
Using sulfates of heavy metals or metal oxide cations as catalysts. FLUE GAS; DESULFURIZATION; REMOVAL; HYDROGEN SULFIDES; OXIDATION; SULFUR DIOXIDE; CATALYSTS; SULFATES; TITANIUM COMPOUNDS; ZIRCONIUM COMPOUNDS; MOLYBDENUM COMPOUNDS; TUNGSTEN COMPOUNDS; VANADIUM COMPOUNDS; OXYGEN
- 01031 REMOVAL OF ORGANIC SULFUR COMPOUNDS FROM GASES BY CONVERSION INTO HYDROGEN SULFIDE. (to Ruhrchemie and Gottfried Bischoff GmbH). British Patent 769,664. 13 Mar 1957.
In presence of Ni catalyst. COAL GAS; DESULFURIZATION; REMOVAL; ORGANIC SULFUR COMPOUNDS; CATALYSTS; NICKEL; KIESELGUHR; DOLOMITE; HYDROGEN SULFIDES
- 01032 REMOVAL OF HYDROGEN SULFIDE FROM GASES. Guinot, H.M. (to Societe anon Ateliers Pingris and Mollet-Fontaine Reunis). British Patent 769,854. 13 Mar 1957.
By oxidation to S by scrubbing with $\text{Fe}(\text{OAc})_2$ solution and oxygen. COAL GAS; DESULFURIZATION; REMOVAL; HYDROGEN SULFIDES; OXIDATION; IRON COMPOUNDS; SCRUBBING; ACETATES; OXYGEN; PROMOTERS; MANGANESE COMPOUNDS; COPPER COMPOUNDS; COBALT COMPOUNDS; CERIUM COMPOUNDS
- 01033 DESULFURIZATION AND CONCENTRATION OF COAL. Siddiqui, S. German(FRG) Patent 1,055,012. 28 Mar 1957.
By addition of 1% CaCO_3 , NaOH, Na_2CO_3 , or MgCO_3 . COAL; DESULFURIZATION; REMOVAL; HYDROGEN SULFIDES; SODIUM HYDROXIDES; CALCIUM CARBONATES; SODIUM CARBONATES; MAGNESIUM CARBONATES; IRON SULFIDES; REDUCTION
- 01034 REMOVAL OF HYDROGEN SULFIDE FROM GAS MIXTURES. Giammarco, G. (to Vetrocoke Societa per Azioni). Italian Patent 560,161. 2 Apr 1957.
Coke-oven gas ($6.8\text{g H}_2\text{S}/\text{m}^3$) washed with solution of alkaline salts equivalent to 12 kg $\text{Na}_3\text{PO}_4/\text{m}^3$; 56 kg Na_2HPO_4 , and 50 kg As_2O_3 ; purification is complete; precipitated As_2S_3 roasted to produce SO_2 and recover As_2O_3 . HYDROGEN SULFIDES; REMOVAL; COAL GAS; DESULFURIZATION; WASHING
- 01035 REMOVAL OF HYDROGEN SULFIDE FROM GASES. Scholz, G. (to Gottfried Bischoff GmbH). German(FRG) Patent 1,005,680. 4 Apr 1957.
Using active carbon in the presence of O with simultaneous washing of the sorbents with sulfide or polysulfide solutions. GASES; DESULFURIZATION; REMOVAL; HYDROGEN SULFIDES; ADSORPTION; ACTIVATED CARBON; OXYGEN; SOLUTIONS; SULFIDES
- 01036 SEPARATION OF CARBON DIOXIDE, HYDROGEN SULFIDE, AND ORGANIC SULFUR COMPOUNDS FROM COKE-OVEN GASES. Karwat, E.; Kruis, A. (to Gesellschaft fuer Linde's Eismaschinen). German(FRG) Patent 961,741. 11 Apr 1957.
CARBON DIOXIDE; HYDROGEN SULFIDES; ORGANIC SULFUR COMPOUNDS; REMOVAL; COAL GAS; DESULFURIZATION; PURIFICATION
- 01037 DRYING AND DESULFURIZATION OF GASES UNDER PRESSURE. Dovermann, E.; Holthaus, P. (to Markische Steinkohlengewerkschaft). German(FRG) Patent 1,006,111. 11 Apr 1957.
Removal of H_2S from natural gas under pressure by absorption. NATURAL GAS; DESULFURIZATION; REMOVAL; HYDROGEN SULFIDES; DRYING; ADSORPTION; MEDIUM PRESSURE
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Removal of organically combined sulfur using natural ores of Ni, Co, and Fe (oxides or sulfides). GASES; DESULFURIZATION; REMOVAL; ORGANIC SULFUR COMPOUNDS; CATALYSTS; ORES; NICKEL OXIDES; COBALT OXIDES; IRON OXIDES; NICKEL SULFIDES; COBALT SULFIDES; IRON SULFIDES; HIGH TEMPERATURE
- 01039 REMOVAL OF HYDROGEN SULFIDE FROM GASES. (to Bergwerksverband zur Verwertung von Schutzrechten der Kohlentechnik GmbH). British Patent 772,905. 17 Apr 1957.
By spraying with ammoniacal liquor. GASES; DESULFURIZATION; REMOVAL; HYDROGEN SULFIDES; AMMONIA; SOLUTIONS; SCRUBBING
- 01040 PURIFICATION AND METHANE FORMATION FROM GAS MIXTURES CONTAINING OXIDES OF CARBON AND HYDROGEN. (to Ruhrchemie). British Patent 774,283. 8 May 1957.
Combined desulfurization and methane formation on fluidized Ni catalyst. WATER GAS; DESULFURIZATION; REMOVAL; ORGANIC SULFUR COMPOUNDS; PRODUCTION; METHANE; FLUIDIZED CATALYSTS; NICKEL; CALCIUM CARBONATES; ALUMINIUM OXIDES; SILICON OXIDES; IRON OXIDES
- 01041 CATALYTIC DESULFURIZATION OF GASES. Feller, P.; Hauber, H.; Hennicke, W. (to Badische Anilin- and Soda-Fabrik). German(FRG) Patent 1,007,937. 9 May 1957.
By conduction over activated residues from carbonization containing at least 12% Fe. WATER GAS; DESULFURIZATION; ADSORPTION; ACTIVATED CARBON; IRON; AIR; AMMONIA
- 01042 SEPARATING ACID GASES FROM GAS MIXTURES. Giammarco, G. (to Vetrocoke Societa per Azioni). Italian Patent 564,203. 12 Jun 1957.
Addition of activating substances, such as proteins and amino acids, to absorbing solution. CARBON DIOXIDE; HYDROGEN SULFIDES; REMOVAL; EQUIPMENT; GASES; DESULFURIZATION; PURIFICATION
- 01043 CATALYSTS FOR PURIFICATION OF GASES. Schutze, M. (to Badische Anilin- and Soda-Fabrik). German(FRG) Patent 965,634. 13 Jun 1957.
Hydrogenation catalysts used in purification of gases. CATALYSTS; ORGANIC SULFUR COMPOUNDS; SULFUR COMPOUNDS; REMOVAL; GASES; PURIFICATION; DESULFURIZATION
- 01044 SULFUR REMOVAL FROM COMBUSTION GASES. Kruger, G. (to Steinkohlen-Elektrizitats). German(FRG) Patent 965,762. 19 Jun 1957.
Splinters of Mn-containing Fe and/or cast steel used to remove S. SULFUR; REMOVAL; GASES; DESULFURIZATION
- 01045 CYCLIC ADSORPTION PROCESS OR RECOVERY OR REMOVAL OF HYDROGEN SULFIDE FROM NATURAL GAS. Miller, E.B. (to Jefferson Lake Sulphur Co.). US Patent 2,799,361. 16 Jul 1957.
Adsorption in a series of SiO_2 -gel beds. NATURAL GAS; DESULFURIZATION; REMOVAL; HYDROGEN SULFIDES; ADSORPTION; SILICON OXIDES; GELS
- 01046 REMOVAL OF ORGANIC SULFUR COMPOUNDS FROM INDUSTRIAL GASES. Basak, N.G.; Mazumdar, A.C.; Lahiri, A.N. (to Council of Scientific and Industrial Research). Indian Patent 55,817. 31 Jul 1957.
Catalyst of Cu chromite or chromate

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- 01047 REMOVAL OF INORGANIC SULFUR COMPOUNDS FROM INDUSTRIAL GASES. Basak, N.G.; Mazumdar, A.C.; Lahiri, A.N. (to Council of Scientific and Industrial Research). Indian Patent 55,816. 31 Jul 1957.
Gas passed over catalyst of Fe_2O_3 and $CaSO_4$. COAL GAS; SULFUR COMPOUNDS; CATALYSTS; CHEMICAL PREPARATION; REMOVAL; DESULFURIZATION; PRODUCER GAS
- 01048 REMOVAL OF SULFUR FROM GASES CONTAINING HYDROGEN SULFIDE. Radusch, P. (to Heinrich Koppers GmbH). German (FRG) Patent 1,014,081. 22 Aug 1957.
GASES; DESULFURIZATION; REMOVAL; HYDROGEN SULFIDES; ABSORPTION; SOLUTIONS; REGENERATION; SULFUR
- 01049 PURIFICATION OF GASES CONTAINING HYDROCARBONS AND HYDROGEN SULFIDE. Thormann, K. (to Metallgesellschaft). German (FRG) Patent 1,014,278. 22 Aug 1957.
By low-temperature absorption with toluene or xylene. COAL GAS; NATURAL GAS; PURIFICATION; DESULFURIZATION; REMOVAL; HYDROGEN SULFIDES; ORGANIC SULFUR COMPOUNDS; HYDROCARBONS; ABSORPTION; TOLUENE; XYLENES; OILS
- 01050 TOWN GAS FREE OF HYDROGEN SULFIDE. Bayer, R. (to Metallgesellschaft). German (FRG) Patent 1,014,704. 29 Aug 1957.
By passage through a mixture of natural bog-iron ore and Fe oxide hydrate. TOWN GAS; DESULFURIZATION; REMOVAL; HYDROGEN SULFIDES; IRON ORES; IRON OXIDES; HYDRATES
- 01051 PURIFICATION OF INDUSTRIAL GASES CONTAINING HYDROGEN SULFIDE. Mercier, R.M.; Mayor, Y.P.P.; Bieselaar, D. French Patent 1,141,619. 4 Sep 1957.
Use of $FeCl_3$ solution to remove H_2S . GASES; DESULFURIZATION; REMOVAL; HYDROGEN SULFIDES; SOLUTIONS; IRON CHLORIDES; REGENERATION
- 01052 DESULFURIZATION OF COAL GAS. Otten, E.; Schmidt, W. (to Deutsche Gerätebau GmbH). German (FRG) Patent 1,015,182. 5 Sep 1957.
Removal of H_2S . COAL GAS; DESULFURIZATION; REMOVAL; HYDROGEN SULFIDES; SCRUBBING
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Removal of H_2S by scrubbing with NH_3 in gaseous form. COAL GAS; DESULFURIZATION; REMOVAL; HYDROGEN SULFIDES; SCRUBBING; AMMONIA
- 01054 COSTS OF SCRUBBING OUT SO_2 FROM FLUE GASES. Field, J.H.; Brunn, L.M.; Haynes, W.P.; Benson, H.E. Combustion; 29: No. 5, 61-6 (Nov 1957).
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- 01055 NEWEST SULFUR-RECOVERY PROCESS. Townsend, F.M.; Reid, L.S. (Univ. of Oklahoma, Norman). Petrol. Refiner; 37: 263-6 (1958).
Process cannot be carried out with gases containing excessive amounts of CO_2 . SULFUR; REMOVAL; HYDROGEN SULFIDES; NATURAL GAS; OXIDATION; SCRUBBING; DESULFURIZATION
- 01056 DESULFURIZATION OF WINKLER WATER GAS WITH KOPPERS COKE. Streller, G. Freiburger Forschungsh.; A103: 51-64 (1958).
- Comparison of effectiveness of Koppers coke with Lauta mass and activated carbon for removal of H_2S . WATER GAS; DESULFURIZATION; REMOVAL; HYDROGEN SULFIDES; COMPARATIVE EVALUATIONS; COKE; ACTIVATED CARBON
- 01057 INFLUENCE OF VOLATILE CONSTITUENTS ON DESULFURIZATION OF COAL DURING LOW-TEMPERATURE GASIFICATION. Mirev, D.; Zlateva, I. (Bulgar. Akad. Wiss., Sofia). Brennst.-Chem.; 39: 366-8 (1958).
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- 01058 NEW TWO-WAY PROCESS SWEETENS GAS AND RECOVERS SULFUR. Reid, L.S.; Townsend, F.M. (Univ. of Oklahoma, Norman). Oil Gas J.; 56: No. 41, 120-2, 124 (1958).
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- 01059 LIQUID REAGENTS FOR THE FINAL REMOVAL OF HYDROGEN SULFIDE FROM GASES. Newling, W.B.S. Gas Council (Gt. Brit.), Research Commun.; GC46: 34p. (1958).
Alkaline Zn slurry reagents are effective for final purification of coal gas or mixed gas. HYDROGEN SULFIDES; REMOVAL; COAL GAS; ZINC HYDROXIDES; SLURRIES; WASHING; DESULFURIZATION
- 01060 GAS PURIFICATION AND SULFUR RECOVERY BY THE GASTECHNIK PROCESS. Myhill, A.R. Coke and Gas; 20: 454-60 (1958).
Review of Gastechnik process. SULFUR; HYDROGEN SULFIDES; REMOVAL; FUEL GAS; DESULFURIZATION
- 01061 SULFUR DIOXIDE - ITS CHEMISTRY AND REMOVAL FROM INDUSTRIAL WASTE GASES. Bienstock, D.; Brunn, L.W.; Murphy, E.M.; Benson, H.E. Bur. of Mines, Inf. Circ., No. 7836. Washington, DC; Bur. of Mines (1958). 1-96p.
Review of methods; 253 references. FLUE GAS; DESULFURIZATION; REMOVAL; SULFUR DIOXIDE; ABSORPTION; ADSORPTION; REDUCTION; OXIDATION; REGENERATION; SULFATES; REVIEWS
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- 01063 ABSORPTION OF HYDROGEN SULFIDE BY ARSENATE-CARBONATE SOLUTIONS. Ipat'ev, V.V.; Tikhomirov, V.I.; Soboleva, N.F. Zh. Prikl. Khim.; 31: 1472-7 (1958).
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- 01064 PURIFICATION OF COMBUSTIBLE GASES FROM SULFUR COMPOUNDS. Revzin, F.Y. Vestnik Tekh. i Ekon. Inform. Mezhotrasl. Lab. Tekh.-Ekon. Issledovan. i Nauch.-Tekh. Inform. Nauch.-Issledovatel. Fiz. Khim. Inst. im L. Ya. Karpova; 1958: No. 2, 32-8 (1958).
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- 01065 REDUCTION OF THE SULFUR CONTENT OF CONCENTRATES IN THE DONETS BASIN COAL-

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- 01066 KOPPERS COKE OR H₂S EXTRACTION FROM COAL GAS MIXTURES. Schmidt, J.; Hanke, E. Freiburger Forschungsh.; A103: 89-102(1958).
Effects of particle size of coke. COAL GAS; DESULFURIZATION; REMOVAL; HYDROGEN SULFIDES; ABSORPTION; COKE; PARTICLE SIZE
- 01067 REMOVAL OF HYDROGEN SULFIDE FROM INDUSTRIAL GASES WITH KOPPERS FINE-PARTICLE COKE. Klein, O.; Pirscher, P.; Will, H. Freiburger Forschungsh.; A103: 34-50(1958).
Comparison of effectiveness with that of Lata mass. SYNTHESIS GAS; DESULFURIZATION; REMOVAL; HYDROGEN SULFIDES; ORGANIC SULFUR COMPOUNDS; ABSORPTION; COKE; AMMONIA
- 01068 REMOVAL OF HYDROGEN SULFIDE FROM GAS BY USING AN ORGANIC OXYGEN CARRIER. Davis, J.E.; Mills, J.E.; Ryder, C. Gas Council (Gt. Brit.), Research Commun.; GC45: 20p.(1958).
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- 01072 REMOVAL OF HYDROGEN SULFIDE FROM GAS BY THE ARSENIC-SODA METHOD. Pan'kovskiy, V.I.; Kulikova, T.I. Gazov. Prom.; No. 3, 19-22(1958).
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- 01076 EXTRACTION OF SULFUR FROM COKE-OVEN GAS AND THE MANUFACTURE OF SULFURIC ACID. Purcell, P.R.; Williams, T.H. Iron Steel Inst. (London), Spec. Rept.; 61: 56-61(1958).
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HYDROGEN SULFIDES;SODIUM COMPOUNDS;THIOSULFATES

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Residues, dust, etc., removed hydraulically; then gas is cooled and heavy tar and medium oil are condensed fractionally. COAL GAS; PURIFICATION
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- 01133 PURIFICATION OF GASES CONTAINING CARBON DIOXIDE AND SULFUR COMPOUNDS. (to Metallgesellschaft). German(FRG) Patent 1,047,365. 24 Dec 1958.
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- 01134 REMOVAL OF HYDROGEN SULFIDE FROM GAS STREAMS. Lamont, A.G.W. (to Houdry Process Corp.). US Patent 2,866,679. 30 Dec 1958.
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- 01135 GIAMMARCO—VETROCOKE PROCESSES. Reisenfeld, F.C.; Mullowney, J.F. (Fluor Corp., Ltd., Los Angeles, CA). Petrol. Refiner; 38: No. 5, 161-8(1959).
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- 01137 OPERATION OF LIQUID AND GASTECHNIK PURIFICATION PLANTS AT CARDIFF. Powdermill, J. (Inst. Gas Engrs.). No. 551, 44p.(1959).
Washing of gas with weak alkaline solution containing suspension of hydrated Fe₂O₃. HYDROGEN SULFIDES;REMOVAL;GASES;DESULFURIZATION
- 01138 AMMONIA-CIRCULATION METHOD (IN DESULFURIZING GAS) AND ITS CONDITIONS. Dalluge, G. Energietechnik; 9: 514-6(1959).
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- 01143 ORGANIC SULFUR IN MANUFACTURED GAS. Jaenicke, W. (Inst. Gas Technol., Karlsruhe, Ger.). Gas- Wasserfach; 100: 1281-4(1959).
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- 01145 BEHAVIOR OF SULFUR IN THE PROCESS OF COAL CHLORINATION. Losev, I.; Vorob'eva, N.S.; Ninin, V.K.; Zimakova, E.A. Zh. Prikl. Khim.; 32: 2300-3(1959).
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- 01147 REDUCTION OF THE ASH AND SULFUR CONTENT OF COAL IN THE LAYER T₂. Galiguzov, N.S. Obogashchen. i Briketirovan. Ugeli; 1959: No. 9, 38-42(1959).
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- 01151 POSSIBILITY OF CONVERTING THE ORGANIC SULFUR OF COALS INTO CALCIUM SULFIDE BY COKING IN THE PRESENCE OF CALCIUM HYDRIDE. Angelova, G.K.; Syskov, K.I. (D. I. Mendeleev Chem.- Technol. Inst., Moscow). Nauch. Doklady Vysshei Shkoly, Khim. i Khim. Tekhnol.; 1959: No. 1, 166-8(1959).
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- 01152 WATER WASHING FOR ACID GAS REMOVAL. Burnham, J.G. (Stearns-Roger Mfg. Co., Denver, CO). Petrol. Engr.; 31: No. 2, C15, 16, 18, 21(1959).
Design and economic report on use of H₂O to remove H₂S and CO₂ from natural gas; process particularly effective for high H₂S/CO₂ ratios. WATER; WASHING; HYDROGEN SULFIDES; CARBON DIOXIDE; REMOVAL; ECONOMICS; NATURAL GAS; DESULFURIZATION; PURIFICATION
- 01153 LACQ IS A SOURCE OF NATURAL GAS AND SULFUR. Chwalibog, H. Chemik (Gliwice); 12: 58-60(1959).
Gas contains light hydrocarbons with 15.2% H₂S and 9.6 CO₂; H₂S removed by Girbotol process and converted to S by Claus method. NATURAL GAS; SULFUR; PRODUCTION; DESULFURIZATION; HYDROGEN SULFIDES; REMOVAL; GIRBOTOL PROCESS; CLAUS PROCESS
- 01154 REMOVAL OF HYDROGEN SULFIDE IN COAL GAS BY LIME SUSPENSION IN HIGHLY EFFICIENT SIEVE-PLATE TOWER. Cheng, Y.-Y.; Wei, T.-H.; Ts'ao, P.-H.; Wang, P.; Lo, K.-H.; Hsu, H.-M. (Peking Inst. Petroleum Technol.). Jan Liao Hsueh Pao; 4: 329-39(1959).
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- 01155 RECOVERY OF HYDROGEN SULFIDE FROM GAS BY AMMONIA LIQUOR. II. EVOLUTION OF AMMONIA AND HYDROGEN SULFIDE FROM THE ENRICHED AMMONIA LIQUOR. Rosendahl, F. Gas- Wasserfach; 100: 362-6(1959).
Continuation of review of patents on H₂S recovery. HYDROGEN SULFIDES; REMOVAL; AMMONIA; GASES; DESULFURIZATION
- 01156 CONVERSION OF ORGANIC COMPOUNDS OF SULFUR ON A COBALT--MOLYBDENUM CATALYST IN THE SCRUBBING OF GASES. Brodskaya, N.I.; Teodorovich, V.P. Zh. Prikl. Khim.; 32: 2448-52(1959).
COAL GAS; DESULFURIZATION; REMOVAL; ORGANIC SULFUR COMPOUNDS; CATALYSTS; COBALT; MOLYBDENUM; HYDROGEN SULFIDES
- 01157 PUTTING TO WORK THE NATURAL GAS DEPOSITS AT LACQ. Fouchier, J.; Vicart, M. (Inst. Gas Engrs.). No. 543, 20p.(1959).
Gas contains 20% by volume H₂S and 9.7% CO₂; acidic gases removed by mono- and diethanolamine, conversion of H₂S to S by Claus process, and recovery of higher hydrocarbons. NATURAL GAS; DESULFURIZATION; HYDROGEN SULFIDES; OXIDATION; SULFUR; REMOVAL; CLAUS PROCESS
- 01158 DESULFURIZATION OF COAL DURING COKING BY THE ACTION OF HYDROGEN. Angelova, G.K.; Syskov, K.I. Tr. Mosk. Khim.-Tekhnol. Inst.; 1959: No. 28, 51-7(1959).
Coal sample heated in quartz tube in current of H while increasing temperature from 350-400° to 850° at rate of 5°/min. COAL; DESULFURIZATION; HYDROGEN; HYDROGEN SULFIDES; REMOVAL; SULFUR; PRODUCTION
- 01159 TREATMENT OF NATURAL GAS AT LACQ. Berthier, M. Chim. Ind. (Paris); 81: 49-55(1959).
High H₂S content reduced by ethanolamine treatment; by-product is S; gas dried and cooled for fractionation. NATURAL GAS; HYDROGEN

- SULFIDES; REMOVAL; AMINES; ALCOHOLS; DESULFURIZATION
- 01160 REMOVAL OF HYDROGEN SULFIDE FROM GASES. Mills, J.E. (to Gas Council). US Patent 2,868,617. 13 Jan 1959.
H₂S removed from gases by washing gas with solution of dye base that yields readily oxidizable reduction product on contact with H₂S and then bringing solution into contact with air or O. HYDROGEN SULFIDES; REMOVAL; GASES; DESULFURIZATION
- 01161 GASIFICATION OF CARBONACEOUS MATERIALS. Woebecke, H.N. (to Hydrocarbon Research, Inc.). US Patent 2,868,631. 13 Jan 1959.
Carbonaceous materials of high ash and moisture content are fluidized and gasified; equipment. GASIFICATION; CARBONACEOUS MATERIALS; EQUIPMENT
- 01162 REGENERATION OF ALKALI METAL CARBONATE SOLUTIONS USED TO REMOVE HYDROGEN SULFIDE FROM COAL-DISTILLATION GASES. Hitz, F. (to Heinrich Koppers GmbH). German(FRG) Patent 1,050,012. 5 Feb 1959.
Solutions treated with air in 2 steps; first with air at 5 atm to oxidize H₂S almost to S, and then with air and solution countercurrently to remove up to 99.82% original H₂S. COAL GAS; DESULFURIZATION; HYDROGEN SULFIDES; REMOVAL; COAL; DISTILLATION; ALKALI METAL COMPOUNDS; CARBONATES; REGENERATION; OXIDATION
- 01163 REMOVAL OF HYDROGEN SULFIDE FROM GASES. Uffelmann, R.; Fischer, F. (to Pintsch-Ramag). German(FRG) Patent 1,050,013. 5 Feb 1959.
Fe(III) salts oxidize H₂S to S and are reduced to Fe(II); oxidation of H₂S is: $3\text{H}_2\text{S} + 3\text{Fe}_2(\text{SO}_4)_3 \rightarrow 3\text{S} + 3\text{H}_2\text{SO}_4 + 6\text{FeSO}_4$; regeneration: $3\text{H}_2\text{SO}_4 + 3\text{Fe}(\text{SO}_4)_2(\text{OH})_2 \rightarrow 3\text{Fe}_2(\text{SO}_4)_3 + 6\text{H}_2\text{O}$ and $6\text{FeSO}_4 + 1.5\text{O}_2 + 3\text{H}_2\text{O} \rightarrow 3\text{Fe}(\text{SO}_4)_2(\text{OH})_2$. HYDROGEN SULFIDES; REMOVAL; OXIDATION; IRON COMPOUNDS; REDUCTION; GASES; DESULFURIZATION
- 01164 RECOVERY OF HYDROGEN SULFIDE FROM NATURAL GAS. Miller, E.B. (to Jefferson Lake Sulphur Co.). US Patent 2,877,861. 17 Mar 1959.
Cyclic adsorption process using SiO₂ gel. HYDROGEN SULFIDES; REMOVAL; NATURAL GAS; DESULFURIZATION
- 01165 PURIFYING NATURAL GASES. Herbert, W.; Danulat, F.; Kohrt, H.U.; Becker, R. (to Gesellschaft fuer Linde's Eismaschinen and Lurgi Gesellschaft fuer Waermetechnik mbH). German(FRG) Patent 971,786. 26 Mar 1959.
Natural gases cooled in presence neutral polar organic solvents, such as CH₃OH or acetone, and washed with them and (or) nonpolar solvents. NATURAL GAS; PURIFICATION; ORGANIC SULFUR COMPOUNDS; REMOVAL; DESULFURIZATION; HYDROGEN SULFIDES; CARBON DIOXIDE
- 01166 REMOVAL OF SULFUR COMPOUNDS FROM GASES. Kabadze, I.L. USSR Patent 119,172. 15 Apr 1959.
S compounds adsorbed on solid adsorbents; organic S compounds adsorbed on dolomite. SULFUR COMPOUNDS; REMOVAL; GASES; DESULFURIZATION; ORGANIC SULFUR COMPOUNDS; DOLOMITE
- 01167 PURIFICATION OF GASES. Marsh, J.D.F.; Newling, W.B.S. (to Gas Council). British Patent 812,428. 22 Apr 1959.
Washing with weakly ammoniacal ZnSO₄ solution containing sufficient (NH₄)₂SO₄ to prevent precipitation of Zn(OH)₂. HYDROGEN SULFIDES; REMOVAL; DESULFURIZATION; HYDROCYANIC ACID; PURIFICATION; ZINC SULFATES; AMMONIA; AQUEOUS SOLUTIONS; GASES
- 01168 COOLING AND DESULFURIZING OF COAL-DISTILLATION GASES. Opderbecke, O.; Kaiser, W.; Grulich, H. (to Didier-Werke). German(FRG) Patent 1,056,782. 6 May 1959.
SCRUBBING; HYDROGEN SULFIDES; COAL GAS; DESULFURIZATION; REMOVAL
- 01169 REMOVAL OF SULFUR DIOXIDE FROM FLUE GASES. Newall, H.E. (to Simon-Carves Ltd.). German(FRG) Patent 1,056,771. 6 May 1959.
Flue gas passed through 2 successive packed sections each with recirculation of NH₄ salt solution, in single tower. SULFUR DIOXIDE; REMOVAL; FLUE GAS; DESULFURIZATION
- 01170 REMOVAL OF ACID-FORMING GASES FROM SYNTHESIS GAS. Hesky, H. (to Friedrich Uhde GmbH). German(FRG) Patent 1,057,075. 14 May 1959.
Removal of H₂S and CO₂ by absorption in NH₄OH. SYNTHESIS GAS; PURIFICATION; DESULFURIZATION; HYDROGEN SULFIDES; CARBON DIOXIDE; REMOVAL
- 01171 REMOVAL OF HYDROGEN SULFIDE FROM INDUSTRIAL GASES, ESPECIALLY COAL-DISTILLATION GASES. Bischoff, H. (to Bau Kompl. Gasreinigungs und Wasserrueckkuehlanlagen). British Patent 870,688. 15 May 1959.
Dry process for removal of H₂S from industrial gases by tower purifying plants arranged in series. REMOVAL; HYDROGEN SULFIDES; COAL GAS; DESULFURIZATION; AIR; STEAM
- 01172 SULFUR DIOXIDE REMOVAL BY LIQUID ABSORPTION. Kohl, A.L.; Riesenfeld, F.C. Chem. Eng.; 66: No. 12, 147-51 (15 Jun 1959).
Absorption in aromatic amines (xylydine or dimethylaniline). FLUE GAS; DESULFURIZATION; REMOVAL; SULFUR DIOXIDE; CHEMISORPTION; AROMATICS; AMINES; SODIUM CARBONATES; AMMONIA; CALCIUM OXIDES; CALCIUM SULFATES; SODIUM COMPOUNDS; SULFITES; ZINC OXIDES; ALUMINIUM HYDROXIDES; SULFATES
- 01173 REMOVAL OF HYDROGEN SULFIDE FROM INDUSTRIAL OR NATURAL GASES WITH RECOVERY OF ELEMENTAL SULFUR. Garbato, C. Italian Patent 595,686. 2 Jul 1959.
S recovered from H₂S-containing gas with minimum amount of thiosulfate formation by absorption in H₃BO₃ solution containing oxidation catalyst; equipment. HYDROGEN SULFIDES; NATURAL GAS; SULFUR; EQUIPMENT; REMOVAL; DESULFURIZATION; GASES; RECOVERY
- 01174 REMOVAL OF HYDROGEN SULFIDE AND CARBON DIOXIDE FROM GASES. Hitz, F. (to Heinrich Koppers GmbH). German(FRG) Patent 1,061,026. 9 Jul 1959.
Gases, such as those from carbonization of coal, freed from H₂S and CO₂ scrubbing with alkaline liquid containing O carrier. HYDROGEN SULFIDES; REMOVAL; CARBON DIOXIDE; COAL GAS; PURIFICATION; DESULFURIZATION
- 01175 SEPARATION OF TAR, NAPHTHALENE, AMMONIA, HYDROGEN SULFIDE, HYDROGEN CYANIDE, AND PYRIDINE FROM COKE-OVEN GAS. Otten, E.; Schmidt, W. (to Deutsche Geratebau GmbH). German(FRG) Patent 1,062,384. 30 Jul 1959.
Gas scrubbed with ammoniacal liquor. COAL GAS; DESULFURIZATION; PURIFICATION; COAL TAR; NAPHTHALENE; AMMONIA; HYDROGEN SULFIDES; HYDROCYANIC ACID; PYRIDINES; SCRUBBING; REMOVAL; RECOVERY
- 01176 REMOVAL OF HYDROGEN SULFIDE FROM GAS MIXTURES. Bleyer, K. German(FRG) Patent 1,063,320. 13 Aug 1959.
Crude hydrocarbon gases passed through chambers with addition of air and steam, and heating indirectly with ceramic bodies to produced little or no H₂S. HYDROGEN SULFIDES; REMOVAL; AIR; STEAM; CERAMICS; FUEL GAS;

- DESULFURIZATION
- 01177 DESULFURIZATION OF COKE-OVEN GASES. Ibing, H.; Bayerlein, C. (to Firma Hugo Ibing). German(FRG) Patent 1,063,321. 13 Aug 1959.
Washing with NH_4OH to remove H_2S . COAL GAS; DESULFURIZATION; AMMONIA; AQUEOUS SOLUTIONS; WASHING; HYDROGEN SULFIDES; REMOVAL
- 01178 SEPARATION OF HYDROGEN SULFIDE FROM METHANE OR NATURAL GAS. Kurata, F.; Kohn, J.P. US Patent 2,901,326. 25 Aug 1959.
Gas stream of CH_4 containing <6 mole% H_2S subjected to at least 450 p.s.i. and temperature low enough to form 2 liquid phases, one rich in CH_4 and one in H_2S ; H_2S solidified by cooling to <-161°. HYDROGEN SULFIDES; REMOVAL; METHANE; NATURAL GAS; DESULFURIZATION
- 01179 PURIFICATION OF COAL-DISTILLATION GASES. Grosskinsky, D.; Huck, G.; Klempt, W. (to Bergwerksverband GmbH). German(FRG) Patent 972,725. 10 Sep 1959.
Multistep compression and cooling operation. COAL; DISTILLATION; COAL GAS; HYDROGEN SULFIDES; REMOVAL; DESULFURIZATION
- 01180 SEPARATING CARBON DIOXIDE AND HYDROGEN SULFIDE FROM GAS MIXTURES. Benson, H.E.; Field, J.H. British Patent 821,166. 30 Sep 1959.
By cooling as much as 55°F. GASES; DESULFURIZATION; PURIFICATION; REMOVAL; CARBON DIOXIDE; HYDROGEN SULFIDES; COOLING; THERMAL EFFICIENCY
- 01181 REMOVAL OF HYDROGEN SULFIDE FROM GASES. Nicklin, T.; Sommerville, A.W.; Brunner, E.; Isherwood, R. (to North Western Gas Board; Clayton Aniline Co. Ltd.). British Patent 871,233. 21 Oct 1959.
Gas is washed with aqueous alkaline solution of some anthraquinonedisulfonic acids to oxidize H_2S and liberate S; pH of washing solution is 8.5-9.5. HYDROGEN SULFIDES; REMOVAL; OXIDATION; SULFUR; GASES; DESULFURIZATION
- 01182 REMOVING HYDROGEN SULFIDE FROM GASES. Moore, D.B.; Cook, P.S.L. (to Robert Dempster and Sons Ltd.). British Patent 823,366. 11 Nov 1959.
By passing concurrent to a moving granular bed of hydrated Fe oxide. GASES; DESULFURIZATION; REMOVAL; HYDROGEN SULFIDES; GAS FLOW; HYDRATES; IRON OXIDES
- 01183 RECOVERY OF SULFUR FROM COAL-DISTILLATION GASES. Karl, A. (to Heinrich Koppers GmbH). German(FRG) Patent 1,069,590. 26 Nov 1959.
Scrubbing with NH_4OH at pH 8 in presence of air to oxidize H_2S to S. COAL GAS; SULFUR; REMOVAL; DESULFURIZATION; SCRUBBING; HYDROGEN SULFIDES; OXIDATION; AIR; COAL; DISTILLATION
- 01184 DESULFURIZATION OF GASES AND RECOVERY OF ELEMENTARY SULFUR. (to Societe Francaise d'Oxy-Catalyse Sxy-France). French Patent 72,408. 10 Dec 1959.
DESULFURIZATION; SULFUR; REMOVAL; HYDROCARBONS; CATALYSTS
- 01185 REMOVAL OF SULFUR OXIDES FROM FLUE GASES AND STACK GASES. Syers, R. (to Chemical Construction (G.B.) Ltd.). British Patent 825,221. 31 Dec 1959.
By addition of NH_3 and collection of sulfites and sulfates formed on an electrostatic precipitator. FLUE GAS; DESULFURIZATION; REMOVAL; SULFUR DIOXIDE; SULFUR OXIDES; AMMONIA; AMMONIUM COMPOUNDS; SULFITES; SULFATES; ELECTROSTATIC PRECIPITATORS
- 01186 SOLUBILITY OF HYDROGEN SULFIDE IN METHANOL AT LOW TEMPERATURES. Zel'venskii, Y.D.; Strunina, A.V. Gazov. Prom.; 5: No. 1, 42-7(1960).
HYDROGEN SULFIDES; SOLUBILITY; METHANOL; LOW TEMPERATURE
- 01187 PURIFICATION OF INDUSTRIAL GASES FROM HYDROGEN SULFIDE AND CARBON DIOXIDE. Revzin, F.Y. Khim. Prom. (Moscow); 1960: No. 1, 48-50(1960).
Comparison of economics of monoethanolamine process and arsenic-soda process plus H_2O to remove CO_2 . GASES; PURIFICATION; DESULFURIZATION; REMOVAL; HYDROGEN SULFIDES; CARBON DIOXIDE; SCRUBBING; AMINES; ARSENIC; SODIUM CARBONATES; WATER; COMPARATIVE EVALUATIONS; ECONOMICS
- 01188 ETHANOLAMINE PURIFICATION OF GASES. Khromov, B.K. Gazov. Prom.; 5: No. 5, 48-51(1960).
Removal of H_2S and CO_2 . GASES; PURIFICATION; DESULFURIZATION; REMOVAL; HYDROGEN SULFIDES; CARBON DIOXIDE; AMINES
- 01189 INFLUENCE OF VOLATILE CONTENT OF BROWN COALS ON DESULFURIZATION DURING DRY DISTILLATION. Mirev, D.; Zlateva, I. Izvest. Khim. Inst. Bulgar Akad. Nauk.; 7: 3-11(1960).
BROWN COAL; COAL; DESULFURIZATION; VOLATILITY
- 01190 NEW POTASSIUM CARBONATE PROCESS. Goolsbee, J.A.; McLaughlin, H.K. (Tellepsen Petro-Chem Constructors, Houston, TX). Petrol. Refiner; 39: No. 1, 159-60(1960).
Removal of CO_2 and H_2S from natural gas by scrubbing with aqueous K_2CO_3 solution. NATURAL GAS; PURIFICATION; DESULFURIZATION; REMOVAL; CARBON DIOXIDE; HYDROGEN SULFIDES; SCRUBBING; AQUEOUS SOLUTIONS; POTASSIUM CARBONATES
- 01191 CATALYTIC DESULFURIZATION OF TOWN GAS AND OF INDUSTRIAL GASES BY CONTACT MASSES COMPOSED OF MIXED NONMETALLIC CRYSTALS SIMILAR IN STRUCTURE TO THE RANEY PHASE. Simon, A.; Lang, M. (Tech. Hochschule, Dresden, Ger.). Chim. Ind. (Paris); 83: 67-75(1960).
Characteristics of mixed nonmetallic crystals used for extraction of H_2S . TOWN GAS; DESULFURIZATION; REMOVAL; HYDROGEN SULFIDES; FERRITE; CRYSTALS
- 01192 COMBINED WET AND AIR PREPARATION PROCESS FOR PYRITE-CONTAINING BROWN COAL OF THE BRUNSWICK COAL MINE IN HELMSTEDT. Lochte and Franz. Braunkohle; 12: 104-12(1960).
BROWN COAL; COAL; DESULFURIZATION; REMOVAL; PYRITES; DIAGRAMS
- 01193 DESULFURIZING LOW-TEMPERATURE CHAR. Batchelor, J.D.; Gorin, E.; Zielke, C.W. (Consolidation Coal Co., Library, PA). Ind. Eng. Chem.; 52: 161-9(1960).
Effects of pressure, temperature, and H_2S content on kinetics of char desulfurization. CHAR; DESULFURIZATION; TEMPERATURE DEPENDENCE; PRESSURE DEPENDENCE; HYDROGEN SULFIDES; INHIBITION; CHEMICAL REACTION KINETICS
- 01194 USE OF S^{35} IN THE STUDY OF THE PROCESS OF DESULFURIZING COAL. Kulishenko, A.Z.; Medvedev, K.P. Koks i Khim.; 1960: No. 7, 5-10(1960).
Tracer study of reactions. COAL; DESULFURIZATION; CHEMICAL REACTION KINETICS; SULFUR 35 ; TRACER TECHNIQUES; AMMONIUM COMPOUNDS; CHLORIDES; POTASSIUM COMPOUNDS; CHLORINE COMPOUNDS; OXYGEN COMPOUNDS
- 01195 GAS SCRUBBING FOR H_2S REMOVAL AND CH_4 ENRICHMENT. Buswell, A.M. Purdue Univ., Eng. Bull., Ext. Ser.; No. 106, 352-404(1960).
3-stage injector-type scrubber with Cl_2 as

- aid. HYDROGEN SULFIDES;REMOVAL;SCRUBBING;
METHANE;ENRICHMENT;FUEL GAS;DESULFURIZATION
- 01126 REDUCTION OF HYDROGEN SULFIDE CONTENT
IN GENERATOR GAS BY ADDING LIME TO COAL.
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Addition of up to 2% CaO to gasified fuel
containing more than 1.5% S. HYDROGEN SULFIDES;
CALCIUM OXIDES;DESULFURIZATION;COAL;REMOVAL;
COAL GAS
- 01197 HOT POTASH-AMINE TREATING OF SGUR GAS
AT FASHING PLANT. Dungan, J.R., Jr.; Martin,
M.M. (Lone Star Producing Co., Dallas, TX).
Proc. Gas Conditioning Conf.; 1960: 143-
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Description of operation of purification
system for natural gas. CARBON DIOXIDE;HYDROGEN
SULFIDES;REMOVAL;NATURAL GAS;DESULFURIZATION;
PURIFICATION;ECONOMICS
- 01198 PURIFYING GASES CONTAINING HYDROGEN
SULFIDE. Dulinski, W.; Koehsling, Z.
Wiadomosci Naft.; 6: No. 2, 29-30(1960).
H₂S is removed from CH₄ and other gas
streams by absorption in diethanolamine; 50%
diethanolamine is more efficient than 100%.
HYDROGEN SULFIDES;REMOVAL;METHANE;
DESULFURIZATION;AMINES;ALCOHOLS;GASES
- 01199 PURIFICATION OF COKE-OVEN GAS FROM
HYDROGEN SULFIDE BY A SOLUTION OF
MONOETHANOLAMINE UNDER PILOT-PLANT CONDITIONS.
Litvinenko, M.S.; Khvat, M.B.; Pertseva, N.Y.
Sb. Nauchn. Tr., Ukr. Nauchn.-Issled. Uglekhim.
Inst.; 1960: No. 10, 143-63(1960).
Absorption of H₂S and CO₂ by technical
monoethanolamine. COAL GAS;DESULFURIZATION;
HYDROGEN SULFIDES;REMOVAL;ALCOHOLS;AMINES;PILOT
PLANTS;CARBON DIOXIDE;PURIFICATION
- 01200 Oczistka ot sery koksoval'nogo i
drugikh goryuchikh gazov. (PURIFICATION OF
COKE OVEN AND OTHER FUEL GASES FROM SULFUR).
Egorov, N.V. Moscow; Gosudarst. Nauch.-Tekh.
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DESULFURIZATION
- 01201 REMOVING HYDROGEN SULFIDE BY HOT
POTASSIUM CARBONATE ABSORPTION. Field, J.H.;
Johnson, G.E.; Benson, H.E.; Tosh, J.S. (U.
S. Bur. of Mines, Pittsburgh, PA). U. S. Bur.
Mines, Rept. Invest.; No. 5660, 19p.(1960).
CO₂ removed simultaneously with H₂S.
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GASES;DESULFURIZATION
- 01202 DRY GAS DESULFURIZATION TECHNIQUE.
Boznanski, A.; Falecki, M.; Kowal, S.
(Centralne Lab. Gazownictwa, Warsaw). Gaz,
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Use of Fe oxide beds. COAL GAS;
DESULFURIZATION;IRON OXIDES
- 01203 DESULFURIZATION OF COAL AND COKE BY
CHEMICAL AND PHYSICO-CHEMICAL METHODS.
Krasnyukov, A.F.; Slutskaya, S.M.; Tsin'ko, A.V.
Trudy Bashkirsk. Nauch.-Issledovatel. Inst. po
Pererabotke Nefti; 1960: No. 4, 76-82(1960).
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the most economical means for decreasing S
content of coke. COAL;COKE;DESULFURIZATION
- 01204 REMOVAL OF THE HYDROGEN SULFIDE CONTENT
FROM SOFT COAL DISTILLATION GAS BY ABSORPTION
IN SODIUM BIPHENOLATE SOLUTION. Takacs, P.
(Research Inst. Heavy Chem. Ind., Veszprem,
Hung.). Nehezvegyipari Kutato Intezet
Kozlemenyel; 2: 65-106(1960).
Gas contained approximately 25% CO₂, 14%
H₂S, and 1.52 g organic S/m³, continuous method
for lowering H₂S content; gas washed with NaOH
and then pyrocatechol. HYDROGEN SULFIDES;
REMOVAL;COAL GAS;DESULFURIZATION;ORGANIC SULFUR
COMPOUNDS
- 01205 REMOVAL OF HYDROGEN SULFIDE FROM
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Co. Inc., Baton Rouge, LA). Proc. Gas
Conditioning Conf.; 1960: 53-64(1960).
Review of processes including Fe oxide,
ferrox, Ni, Thylox, Seaboard, phenolate,
caustic soda, lime, and aqueous amine. HYDROGEN
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REVIEWS;FLOWSHEETS;COST
- 01206 REMOVAL OF HYDROGEN SULFIDE AND OTHER
ACID IMPURITIES FROM GASES. Karl, A. (to
Heinrich Koppers GmbH). German(FRG) Patent
1,074,202. 28 Jan 1960.
Use of aqueous solution of alkali metal
carbonate and bicarbonate containing
substituted or unsubstituted hydroxy- or
polyhydroxybenzenes. HYDROGEN SULFIDES;REMOVAL;
COAL GAS;DESULFURIZATION;OXIDATION;SULFUR;
ALKALI METAL COMPOUNDS;CARBONATES;AQUEOUS
SOLUTIONS
- 01207 REMOVAL OF ACIDIC COMPONENTS FROM
GASES. Thormann, K.; Kohrt, H.U.; Bratzler,
K.; Gross, H.W. (to Metallgesellschaft).
German(FRG) Patent 1,074,200. 28 Jan 1960.
Removal of CO₂, SO₂, and HCN from gases at
<120° and >10 atm with 30-60% aqueous Na₂CO₃.
REMOVAL;CARBON DIOXIDE;SULFUR DIOXIDE;
HYDROCYANIC ACID;SODIUM CARBONATES;AQUEOUS
SOLUTIONS;GASES;DESULFURIZATION;PURIFICATION
- 01208 REMOVING HYDROGEN SULFIDE FROM GASES.
Mills, J.E. (to Gas Council). British
Patent 827,151. 3 Feb 1960.
By scrubbing with a solution of an organic
dye base. GASES;DESULFURIZATION;REMOVAL;
HYDROGEN SULFIDES;SCRUBBING;DYES;ANILINE;
CRESOLS
- 01209 REMOVAL OF SULFUR FROM CARBONACEOUS
MATERIALS. Batchelor, J.D.; Curran, G.P.;
Gorin, E. (to Consolidation Coal Co.). US
Patent 2,927,063. 1 Mar 1960.
Removal of H₂S using MnO and inert carrier.
COAL;DESULFURIZATION;REMOVAL;HYDROGEN SULFIDES;
ABSORPTION;MANGANESE OXIDES;REGENERATION
- 01210 DESULFURIZATION OF GASES. Schade, H.
(to Firma August Klönne). German(FRG) Patent
1,076,874. 3 Mar 1960.
Two-step scrubbing with ammoniacal liquors
to remove H₂S from gases. DESULFURIZATION;
HYDROGEN SULFIDES;REMOVAL;SCRUBBING;GASES;
AMMONIA;SOLUTIONS
- 01211 REMOVING SULFUR BY THE CATALYTIC
OXIDATION OF THE GASES. (to Societe Francaise
d'Oxy-Catalyse Oxy-France). French Patent
1,209,894. 4 Mar 1960.
Gases containing H₂S, CH₃SH, and COS
oxidized with air or O to H₂O, CO₂, and SO₂
over catalyst. SULFUR;REMOVAL;HYDROGEN SULFIDES;
THIOLS;CARBON OXIDES;CARBON DIOXIDE;OXIDATION;
SULFUR DIOXIDE;GASES;DESULFURIZATION
- 01212 DESULFURIZATION OF CARBON MONOXIDE-
CONTAINING GASES. Eastman, D. (to Texaco
Development Corp.). British Patent 829,844.
9 Mar 1960.
Gasification of solid carbonaceous fuel in
presence of CaO, Ca(OH)₂, or CaCO₃; resulting
gas brought into contact with lime water to
produce gas substantially free of S.
DESULFURIZATION;CARBON MONOXIDE;GASIFICATION;
CARBONACEOUS MATERIALS;SOLIDS;CALCIUM OXIDES;
CALCIUM HYDROXIDES;CALCIUM CARBONATES;FUEL GAS

- 01213 REMOVAL OF HYDROGEN SULFIDE FROM GAS MIXTURES. Bloch, H.S.; Haensel, V. (to Universal Gil Products Co.). US Patent 2,930,673. 29 Mar 1960.
By treatment with moist Ag_3PO_4 , Hg_3PO_4 , $\text{Cu}_3(\text{PO}_4)_2$, $\text{Zn}_3(\text{PO}_4)_2$, or $\text{Cd}_3(\text{PO}_4)_2$ supported on Al_2O_3 or C. METHANE; DESULFURIZATION; REMOVAL; HYDROGEN SULFIDES; SCRUBBING; SILVER PHOSPHATES; COPPER PHOSPHATES; CADMIUM PHOSPHATES; ZINC PHOSPHATES; MERCURY COMPOUNDS; PHOSPHATES; ALUMINIUM OXIDES; CARBON
- 01214 HYDROGEN SULFIDE REMOVAL FROM COAL-DISTILLATION GASES. Strauss, F. (to Gottfried Bischoff K.-G. Bau Kompletter Gasreinigung- und Wasserruckkulanlagen K.-G.). German (FRG) Patent 1,078,729. 31 Mar 1960.
Use of ammoniacal liquor; equipment description. HYDROGEN SULFIDES; REMOVAL; COAL GAS; DESULFURIZATION; CARBON DIOXIDE; PURIFICATION; AMMONIA; EQUIPMENT
- 01215 DESULFURIZATION OF COKE-OVEN GAS. (to Bergwerksverband GmbH). British Patent 832,075. 6 Apr 1960.
 H_2S and NH_3 scrubbed from coke-oven gas in several stages. DESULFURIZATION; COAL GAS; AMMONIA; SCRUBBING; PURIFICATION; HYDROGEN SULFIDES; REMOVAL
- 01216 (PB--221191-T) RESTRICTING EMISSION OF HYDROGEN SULPHIDE AND OTHER SULPHUR-CONTAINING COMPOUNDS, EXCEPT SULPHUR DIOXIDE, FROM GAS GENERATORS IN COKE, GAS, AND COAL-CONSTITUENT PROCESSING PLANTS. May 1960. 22p. (Translated from German). (APTD--1479). NTIS.
Specifications on air pollution. HYDROGEN SULFIDES; REMOVAL; FUEL GAS; DESULFURIZATION; AIR POLLUTION; SPECIFICATIONS
- 01217 REMOVING HYDROGEN SULFIDE FROM GAS MIXTURES. Giammarco, G. (to Vetrocoke S.p.A.). US Patent 2,937,071. 17 May 1960.
By scrubbing with an aqueous solution of an arsenite. GASES; DESULFURIZATION; REMOVAL; HYDROGEN SULFIDES; SCRUBBING; AQUEOUS SOLUTIONS; ARSENIC COMPOUNDS; REGENERATION
- 01218 SCRUBBING OF HYDROGEN SULFIDE FROM COKE-OVEN GAS. (to Bergwerksverband GmbH). British Patent 835,890. 25 May 1960.
Using NH_3 liquor at 5 atmospheres pressure at temperatures as low as 50° . COAL GAS; DESULFURIZATION; REMOVAL; HYDROGEN SULFIDES; SCRUBBING; AMMONIA; MEDIUM PRESSURE; MEDIUM TEMPERATURE
- 01219 GAS-PURIFYING MIXTURES OF HYDRATED IRON OXIDE AND CALCIUM SULFATE. Chakravorty, K.R.; Sen, S.P.; Ghosal, K.K. (to Sindri Fertilizers and Chemicals (Private) Ltd.). Indian Patent 64,247. 1 Jun 1960.
Preparation of catalyst for removal of H_2S from industrial gases. GASES; DESULFURIZATION; REMOVAL; HYDROGEN SULFIDES; CATALYSTS; IRON OXIDES; HYDRATES; CALCIUM SULFATES; CHEMICAL PREPARATION
- 01220 PURIFICATION OF HYDROGEN SULFIDE-CONTAINING GASES. (to Pintsch-Bamag). German (FRG) Patent 1,083,015. 9 Jun 1960.
Oxidation of H_2S carried out catalytically by means of FeSO_4 solution; gas or catalyst may be ozonized or irradiated with uv light to speed up oxidation. HYDROGEN SULFIDES; OXIDATION; OXYGEN; REMOVAL; IRON SULFATES; AQUEOUS SOLUTIONS; ULTRAVIOLET RADIATION; IRRADIATION; OZONE; GASES
- 01221 REMOVAL OF HYDROGEN SULFIDE FROM COKE-OVEN GAS. Otten, E.; Schmidt, W. (to Deutsche Geratebau GmbH). German (FRG) Patent 1,085,641. 21 Jul 1960.
Gaseous NH_3 used for removal of H_2S .
- HYDROGEN SULFIDES; REMOVAL; COKE-OVEN GAS; DESULFURIZATION; AMMONIA
- 01222 SUPPORTED CATALYSTS FOR REMOVAL OF ORGANIC SULFUR COMPOUNDS FROM COMBUSTIBLE GASES. Newling, W.B.S. (to North Thames Gas Board). British Patent 844,093. 10 Aug 1960.
Activated Al_2O_3 is dehydrated and heated to $1250-1350^\circ$ to give corundum ($\alpha\text{-Al}_2\text{O}_3$); porous product soaked in solution of Ni sulfate; pellets are dried at 100° ; Ni sulfate reduced by coal gas to Ni_3S_2 to be used for decomposition of organic S compounds. ORGANIC SULFUR COMPOUNDS; REMOVAL; CATALYSTS; FUEL GAS; DESULFURIZATION; ALUMINIUM OXIDES; CHEMICAL PREPARATION; NICKEL SULFATES
- 01223 PURIFICATION OF GASES. Guinot, H.M. (to Societe pour l'Equipment des Industries Chimiques S. P. E. I. C. H. I. M. Reunion des Anciens Etablissements Barbot, Ergot and Grange, Pingris and Mollet-Fontaine). British Patent 844,095. 10 Aug 1960.
Concentrated solution containing 2-5 moles KH_2PO_4 preferentially absorbs H_2S from mixture with CO_2 and eliminates CO_2 from solution at lower rate than H_2S . HYDROGEN SULFIDES; REMOVAL; DESULFURIZATION; GASES
- 01224 REMOVAL OF SULFUR FROM GASES. Rottig, W.; Hanisch, F. (to Ruhrchemie). German (FRG) Patent 1,086,247. 11 Aug 1960.
Use of oxidized and sulfated Ni catalysts for hydrogenation of organic S compounds with formation of H_2S . SULFUR; REMOVAL; ORGANIC SULFUR COMPOUNDS; COAL GAS; DESULFURIZATION
- 01225 MAINTAINING THE ACTIVITY OF MANGANESE OXIDE HYDROGEN SULFIDE ACCEPTORS FOR DESULFURIZATION OF SOLID CARBONACEOUS FUELS. Batchelor, J.D.; Curran, G.P.; Gorin, E. (to Consolidation Coal Co.). US Patent 2,950,229. 23 Aug 1960.
Regeneration of MnO_2 acceptor of H_2S . COAL; DESULFURIZATION; REMOVAL; HYDROGEN SULFIDES; MANGANESE OXIDES; REGENERATION
- 01226 MANGANESE-ORE HYDROGEN SULFIDE ACCEPTORS FOR DESULFURIZATION OF CARBONACEOUS SOLID FUELS. Batchelor, J.D.; Curran, G.P.; Gorin, E. (to Consolidation Coal Co.). US Patent 2,950,231. 23 Aug 1960.
COAL; DESULFURIZATION; REMOVAL; HYDROGEN SULFIDES; MANGANESE OXIDES; IRON OXIDES; ALUMINIUM OXIDES; SILICON OXIDES; ORES
- 01227 ELIMINATION OF SULFUR FROM COAL BY MICROBIAL ACTION. Rogoff, M.H.; Silverman, M.P.; Wender, I. (U. S. Bur. of Mines, Pittsburgh, PA). Am. Chem. Soc., Div. Gas Fuel Chem., Preprints; 2: 25-36 (Sep 1960).
Increase in oxidation of pyrites by *Ferrobacillus ferrooxidans*. SULFUR; REMOVAL; COAL; DESULFURIZATION; MICROORGANISMS; SULFUR COMPOUNDS; OXIDATION; PYRITES
- 01228 SULFUR REMOVAL FROM GASES. Rottig, W. (to Ruhrchemie). German (FRG) Patent 1,090,368. 6 Oct 1960.
Organic S compounds converted to H_2S by Ni catalyst; S removed by passage over limestone purifier or $\text{Ca}(\text{OH})_2$ catalyst to remove S. ORGANIC SULFUR COMPOUNDS; REMOVAL; HYDROGEN SULFIDES; COAL GAS; DESULFURIZATION
- 01229 GASES FROM THE DISTILLATION OF COAL. Bratzler, K.; Dorschner, O.; Eisenlohr, K.H.; Herbert, W.; Rudbach, W. (to Metallgesellschaft). British Patent 851,443. 19 Oct 1960.
Coke-oven gas purified by catalytic treatment, desulfurization by scrubbing, and removal of lighter hydrocarbons; scrubbing with

- alkaline liquids for desulfurization. COAL; DISTILLATION; COAL GAS; DESULFURIZATION; SCRUBBING; CATALYSIS
- 01230 REMOVAL OF TRACES OF ACIDIC COMPONENTS FROM GAS MIXTURES. Fischer, F.; Kraus, H. (to Pintsch-Bamag). German (FRG) Patent 1,091,272. 20 Oct 1960.
Alkali metal carbonate or other alkaline solution used as absorber for trace amounts of H_2S , HCN , NO_2 , etc.. HYDROGEN SULFIDES; HYDROCYANIC ACID; NITROGEN OXIDES; TRACE AMOUNTS; ORGANIC SULFUR COMPOUNDS; SYNTHESIS GAS; DESULFURIZATION; PURIFICATION; REMOVAL
- 01231 DESULFURIZATION OF GASES. Schade, H. (to Firma August Klonne). German (FRG) Patent 1,091,273. 20 Oct 1960.
 H_2S removed by 2-step scrubbing with ammoniacal liquor. DESULFURIZATION; REMOVAL; HYDROGEN SULFIDES; SCRUBBING; AMMONIA; RECOVERY; GASES
- 01232 REMOVAL OF HYDROGEN SULFIDE FROM GASES BY MEANS OF A WASHING FLUID CONTAINING IRON. (to Humphreys and Glasgow Ltd.). German (FRG) Patent 1,091,696. 27 Oct 1960.
Solution of Fe^{3+} chelate in which Fe is in form of complex with amino acid of type $R(NX_2)_2$, e.g., Na salt of EDTA. HYDROGEN SULFIDES; REMOVAL; GASES; DESULFURIZATION; IRON COMPLEXES; CHELATES
- 01233 SELECTIVE ABSORPTION OF HYDROGEN SULFIDE FROM MIXTURES WITH CARBON DIOXIDE. Rohl, H.; Seibring, H.; Eversmann, W. (to Chemische Werke Huls). German (FRG) Patent 1,093,513. 24 Nov 1960.
Washing solution is aqueous NH_4OH , KOH , $NaOH$, or salt of weak organic acid with strong inorganic base. HYDROGEN SULFIDES; ABSORPTION; CARBON DIOXIDE; WASHING; GASES; DESULFURIZATION; REMOVAL; AMMONIUM COMPOUNDS; HYDROXIDES; POTASSIUM HYDROXIDES; SODIUM HYDROXIDES
- 01234 PURIFICATION OF GASES. Hartley, W.; Craig, R.S.; Sapiro, P.H. (to Humphreys and Glasgow Ltd.). British Patent 855,421. 30 Nov 1960.
Solution of chelated Fe used for removal of H_2S from gases; chelating agents are EDTA; 1,2-diaminocyclohexanetetraacetic acid, and diethylenetriaminepentaacetic acid. HYDROGEN SULFIDES; REMOVAL; GASES; DESULFURIZATION; IRON COMPOUNDS; CHELATES; EDTA; DCTA; DTFA
- 01235 PURIFYING FUEL GASES OF HYDROGEN SULFIDE AND CARBON DIOXIDE. Dorfman, E.Y.; Lupanov, P.A. USSR Patent 134,256. 25 Dec 1960.
Use of aqueous solution of ethylenediamine. HYDROGEN SULFIDES; CARBON DIOXIDE; REMOVAL; FUEL GAS; DESULFURIZATION; PURIFICATION; AMINES
- 01236 HYDROGEN SULFIDE REMOVAL BY THE STRETTFORD LIQUID PURIFICATION PROCESS. Nicklin, T.; Brunner, E. Inst. Gas. Engrs. Publ.; 1: No. 8, 523-49 (1961).
Use of aqueous alkaline solution of Na salts of anthraquinonedisulfonic acids to precipitate S; 18 references. HYDROGEN SULFIDES; REMOVAL; STRETTFORD PROCESS; SULFONIC ACIDS; SULFUR; PRECIPITATION
- 01237 SELECTIVE ADSORPTION TO REMOVE H_2S . Rushton, D.W.; Hays, W. (Can. Equipment Sales and Serv. Co., Ltd., Edmonton). Oil Gas J.; 59: No. 38, 102-3 (1961).
Use of Ca aluminosilicate to more economically sweeten natural gases with CO_2/H_2S above 3:1 than by use of amines. HYDROGEN SULFIDES; REMOVAL; NATURAL GAS; DESULFURIZATION; ECONOMICS
- 01238 CHEMISTRY OF SULFUR IN COAL. Given, P.H.; Wyss, W.F. Brit. Coal Utilisation Research Assoc., Monthly Bull.; 25: 165-79 (1961).
Review with 38 references. SULFUR; CHEMISTRY; COAL; REVIEWS
- 01239 ELIMINATION OF HYDROGEN SULFIDE FROM INDUSTRIAL GASES. Guinot, H.M.; Le Henaff, P.; Tinchant, X. Chim. Ind. (Paris); 85: 561-75 (1961).
Review of established methods of H_2S removal and new method, based on use of aqueous ferric propionate, described; 34 references. HYDROGEN SULFIDES; REMOVAL; FUEL GAS; DESULFURIZATION; IRON COMPOUNDS
- 01240 PURIFICATION OF WATER GAS WITH SOLUTIONS OF ETHANOLAMINES. Lopatin, K.I. (State Univ., Leningrad). Zh. Prikl. Khim.; 34: 66-70 (1961).
Pilot plant studies on removal of CO_2 and H_2S by absorption in solutions of triethanolamine. WATER GAS; PURIFICATION; ALCOHOLS; AMINES; DESULFURIZATION; PILOT PLANTS; CARBON DIOXIDE; HYDROGEN SULFIDES; REMOVAL
- 01241 ORGANIC SULFUR IN [TOWN] GAS. Reinhardt, K. Freiburger Forschungsh.; A217: 23-45 (1961).
Removal using Rectisol process. ORGANIC SULFUR COMPOUNDS; TOWN GAS; RECTISOL PROCESS; DESULFURIZATION; REMOVAL
- 01242 DESULFURIZATION OF GASES WITH DIPHENOLATES. Takacs, P.; Harmathy, L. (NEVIKI, Veszprem, Hung.). Magy. Kem. Lapja; 16: 69-72 (1961).
Equipment and procedure. DESULFURIZATION; HYDROGEN SULFIDES; REMOVAL; COAL GAS; EQUIPMENT
- 01243 REMOVAL OF HYDROGEN SULFIDE FROM COKE-OVEN GAS WITH POTASH SOLUTIONS IN SCRUBBERS WITH FORCED-JET ATOMIZING PLATES. Plit, I.G.; Kuznetsov, E.G.; Loboda, N.S.; Shevchenko, A.I. (Chem.-Technol. Inst., Dnepropetrovsk). Koks i Khim.; 1961: No. 10, 42-7 (1961).
Use of KOH solutions to remove H_2S ; spray-jet plates more effective than packed columns. HYDROGEN SULFIDES; REMOVAL; COAL GAS; DESULFURIZATION; SCRUBBING; POTASSIUM HYDROXIDES; EQUIPMENT
- 01244 MODERN METHODS FOR THE PURIFICATION OF INDUSTRIAL GASES FROM HYDROGEN SULFIDE AND CARBON DIOXIDE. Revzin, F.Y. Khim. Prom. (Moscow); 1961: 130-3 (1961).
Review with 14 references. HYDROGEN SULFIDES; CARBON DIOXIDE; DESULFURIZATION; PURIFICATION; REMOVAL; GASES
- 01245 DESULFURIZATION OF COALS AT LOW TEMPERATURES BY GASEOUS DESULFURIZING AGENTS. I. ATTEMPTS TO DESULFURIZE CERTAIN COALS FROM THE YIU VALLEY BY OXIDATION IN A FIXED BED. Blum, I.; Cindea, V. Acad. Rep. Populare Romine, Inst. Energet., Studii Cercetari Energet.; 11: 325-43 (1961).
Process for desulfurization of noncoking coals by air-steam mixture. COAL; DESULFURIZATION; AIR; STEAM
- 01246 [REMOVAL OF] SULFUR FROM GAS FOR LESS THAN 1 1/2 CENT PER MILLION CUBIC FEET. Pylant, H.S. (Oil and Gas J., Tulsa, OK). Oil Gas J.; 59: No. 4, 94 (1961).
Stretford process consists of ashing sour gas with quinone solution, reaction of H_2S to form S and hydroquinone, oxidation of hydroquinone to quinone, and removal of S by filtration. STRETTFORD PROCESS; HYDROGEN SULFIDES; SULFUR; REMOVAL; OXIDATION; BENZOQUINONES; GASES; DESULFURIZATION

- 01247 GAS DEHYDRATION AND DESULFURIZATION OPERATING PROBLEMS. Gough, J.; Lawrence, L.L.; Worley, M.S. (Black, Sivalis, and Bryson, Ltd., Calgary). Can. Mining Met. Bull.; 588: 318-26(1961).
Discussion of liquid glycols and dry desiccants. DESULFURIZATION; NATURAL GAS; DEHYDRATION
- 01248 ABSORPTION OF CARBON DIOXIDE AND HYDROGEN SULFIDE FROM COMPRESSED GASES IN PACKED COLUMNS, WITH REFRIGERATED METHANOL. Gel'perin, N.I.; Nikiforov, V.A. Gazov. Prom.; 6: No. 4, 39-45(1961).
Mass transfer equation for CO_2 to methanol at -21 to -60° . CARBON DIOXIDE; HYDROGEN SULFIDES; REMOVAL; ABSORPTION; METHANOL; EQUATIONS; GASES; DESULFURIZATION; PURIFICATION
- 01249 REMOVAL OF HYDROGEN SULFIDE FROM SHALE GAS BY AN ARSENIC OXIDE SODA ASH SOLUTION IN A FOAM-TUBE COLUMN. Dytnerskii, Y.I.; Veranyan, R.S.; Petrov, G.G. Tr. Mosk. Khim.-Tekhnol. Inst.; 1961: No. 33, 95-7(1961).
HYDROGEN SULFIDES; REMOVAL; GASES; DESULFURIZATION; EQUIPMENT
- 01250 REMOVAL OF THIOPHENE FROM SYNTHESIS GAS. Kono, K.; Ogoro, H.; Inaba, T. (Univ. Osaka Prefecture). Kogyo Kagaku Zasshi; 64: 888-92(1961).
Comparison of Ni and Mo catalysts. THIOPHENE; REMOVAL; SYNTHESIS GAS; DESULFURIZATION; CATALYSTS; MOLYBDENUM; NICKEL
- 01251 REMOVAL OF CARBON DISULFIDE FROM SYNTHESIS GAS. Kono, K.; Ogoro, H.; Inaba, T. (Univ. Osaka Prefecture). Kogyo Kagaku Zasshi; 64: 631-5(1961).
 CS_2 was converted to H_2S by 2 processes; Fe, Ni, Co, and Cu catalysts fix CS_2 , and Ni, Co, and Mg convert it to H_2S . CARBON SULFIDES; REMOVAL; SYNTHESIS GAS; DESULFURIZATION; CATALYSTS
- 01252 REMOVAL OF DISULFIDES FROM SYNTHESIS GAS. Kono, K.; Ogoro, H.; Inaba, T. (Univ. Osaka Prefecture). Kogyo Kagaku Zasshi; 64: 535-8(1961).
Ni, Co, Fe, and Cu catalysts fix disulfides, and Ni, Co, and Cu convert them to H_2S . ORGANIC SULFUR COMPOUNDS; REMOVAL; SYNTHESIS GAS; DESULFURIZATION; CATALYSTS
- 01253 REMOVAL OF SULFIDES FROM SYNTHESIS GAS. Kono, K.; Ogoro, H.; Inaba, T. (Univ. Osaka Prefecture). Kogyo Kagaku Zasshi; 64: 532-5(1961).
Ni and Co catalysts suitable for fixing sulfides, and Ni, Co, Mo, and Cd for converting them to H_2S . SYNTHESIS GAS; DESULFURIZATION; ORGANIC SULFUR COMPOUNDS; REMOVAL; CATALYSTS
- 01254 REMOVAL OF MERCAPTANS FROM SYNTHESIS GAS. Kono, K.; Ogoro, H.; Inaba, T. (Univ. Osaka Prefecture). Kogyo Kagaku Zasshi; 64: 525-31(1961).
Catalyst consisted of kieselguhr containing 20% (as metal) of oxide of Fe, Ni, Co, Cu, Mn, Cd, Cr, Mo, V, Al, or Mg; thiols converted to H_2S and a small amount to sulfides. THIOLS; REMOVAL; SYNTHESIS GAS; DESULFURIZATION; CATALYSTS
- 01255 BEHAVIOR OF COAL PYRITE DURING FLOTATION AND PRACTICAL ASPECTS OF FLOTATION-DESULFURIZATION OF COALS. Galiguzov, N.S. Tr. Gos. Proektno-Konstrukt. i Nauchn.-Issled. Inst. po Obogashch. i Briketir. Ugli; 1961: No. 17, 59-68(1961).
Optimum conditions for flotation-desulfurization of a coal are also optimum for flotation deashing. COAL; DESULFURIZATION; PYRITES; FLOTATION; USSR; REMOVAL
- 01256 ELIMINATION OF CARBON DIOXIDE AND HYDROGEN SULFIDE FROM GAS MIXTURES WITH INJECTOR ABSORPTION APPARATUS. Gel'perin, N.I.; Grishko, V.Z. Gazov. Prom.; 6: No. 6, 46-52(1961).
Mathematical discussion of physics of CO_2 and H_2S absorption together with scale and diagrammatic drawings of laboratory apparatus. CARBON DIOXIDE; HYDROGEN SULFIDES; REMOVAL; ABSORPTION; DIAGRAMS
- 01257 PURIFICATION OF LIGNITE COKE GAS BY THE GIBBOLT PROCESS WITHOUT PRESSURE. Leibnitz, E.; Koch, H.; Goetze, A. (Deut. Akad. Wiss., Berlin). J. Prakt. Chem.; 13: 215-36(1961).
Absorption of CO_2 and H_2S by $\text{NH}_2\text{CH}_2\text{CH}_2\text{OH}$, $\text{NH}(\text{CH}_2\text{CH}_2\text{OH})_2$, $\text{N}(\text{CH}_2\text{CH}_2\text{OH})_3$, and an alkaline solution of sulfosolvan B ($\text{C}_4\text{H}_8\text{O}_2\text{NK}$) was studied in especially designed apparatus. COAL GAS; GIBBOLT PROCESS; CARBON DIOXIDE; HYDROGEN SULFIDES; REMOVAL; DESULFURIZATION; PURIFICATION; EQUIPMENT; AMINES; ALCOHOLS
- 01258 HYDROGEN SULFIDE REMOVAL [FROM COAL GAS] BY THE STRETFORD LIQUID PURIFICATION PROCESS. Nicklin, T.; Brunner, E. Gas Times; 95: No. 959, 35-8(1961).
 H_2S absorbed by alkaline solutions of anthraquinonedisulfonic acids; dissolved O oxidizes H_2S to S; Na vanadate increases capacity of solution for H_2S and rate of production of S. HYDROGEN SULFIDES; REMOVAL; COAL GAS; STRETFORD PROCESS; OXIDATION; SULFUR; SULFONIC ACIDS; SODIUM COMPOUNDS; VANADATES; DESULFURIZATION
- 01259 PRINCIPLES IN THE PROCESS OF ABSORPTION OF HYDROGEN SULFIDE AND CARBON DIOXIDE BY TRIETHANOLAMINE SOLUTIONS. Lopatin, K.I. (State Univ., Leningrad). Zh. Prikl. Khim.; 34: 265-72(1961).
Graphical method for evaluation of coefficient of absorption. HYDROGEN SULFIDES; ABSORPTION; CARBON DIOXIDE; ALCOHOLS; AMINES; SYNTHESIS GAS; DESULFURIZATION; PURIFICATION; REMOVAL
- 01260 DESULFURIZATION OF COAL BY SALT FLOTATION. Kharlamov, V.S. Sb. Nauchn. Tr. Krivorozhsk. Gornorudn. Inst.; 1961: No. 10, 349-50(1961).
Laboratory experiments on flotation of coal (<0.5 mm) with NaCl solutions of different concentrations. COAL; DESULFURIZATION; FLOTATION
- 01261 REMOVAL OF HYDROGEN SULFIDE FROM GAS IN A "BOILING LAYER" OF MANGANESE SLIMES. Buchukuri, Y.G.; Chagunava, V.T. (V. I. Lenin Polytech. Inst., Tbilisi). Soobshch. Akad. Nauk Gruz. SSR; 26: 659-64(1961).
Mn slime (in pure MnO_2) used as fluidized bed with 3 beds in series; H_2S converted to H_2O , MnS, and S; preferred temperature was $340-500^\circ$. HYDROGEN SULFIDES; REMOVAL; MANGANESE OXIDES; FLUIDIZED BED; GASES; DESULFURIZATION
- 01262 DRY-PROCESS ADSORPTION OF HYDROGEN SULFIDE FROM COKE-OVEN GASES. Steding, A.; Mueller, R. (to Didier-Werke). US Patent 2,967,587. 10 Jan 1961.
Description of process. COAL GAS; DESULFURIZATION; HYDROGEN SULFIDES; REMOVAL; EQUIPMENT
- 01263 RECOVERY OF SULFUR FROM HYDROGEN SULFIDE-CONTAINING GASES. (to Osaka Gas Co., Ltd.). British Patent 860,954. 15 Feb 1961.
Recovery from coal gas, oil gas, or producer gas in 3-step process; dilute Na_2CO_3 used as absorbent for H_2S ; H_2S stripped from absorbent by Seaboard process; gas then scrubbed with solution of picric acid and Na_2CO_3 to oxidized H_2S to S. SULFUR; HYDROGEN SULFIDES; RECOVERY; COAL GAS; PRODUCER GAS; NATURAL GAS; SEABOARD PROCESS; OXIDATION; DESULFURIZATION; REMOVAL

- 01264 REMOVING HYDROGEN SULFIDE FROM GASES, ESPECIALLY COAL GAS. Mills, J.E. (to Gas Council). US Patent 2,975,026. 14 Mar 1961. Washing of coal gas with alkaline solution. COAL GAS; DESULFURIZATION; HYDROGEN SULFIDES; REMOVAL
- 01265 TOWN GAS. Wencke, K. (to VEB Projektierungs-, Konstruktions- und Montageburo PKM Kohleverarbeitung). German (FRG) Patent 1,105,552. 27 Apr 1961. Gases containing CO, H, and S, especially from gasification or degasification of brown coal, treated at 20-40 atm and 400-420° with catalysts of Mo and Al₂O₃; CO₂ and S removed from product. TOWN GAS; MOLYBDENUM; ALUMINIUM OXIDES; CATALYSTS; CHEMICAL PREPARATION; HYDROGEN SULFIDES; CARBON DIOXIDE; REMOVAL; DESULFURIZATION; PURIFICATION
- 01266 DRY PURIFICATION OF FUEL GASES FROM HYDROGEN SULFIDE. Berry, J.K. (to Whessoe Ltd.). British Patent 866,757. 3 May 1961. 80% fuel gas diluted with 20% N. FUEL GAS; DESULFURIZATION; HYDROGEN SULFIDES; REMOVAL; NITROGEN
- 01267 REMOVAL OF HYDROGEN SULFIDE FROM GASES. Newling, W.B.S.; Tanner, M.W.G.; Wingrove, R.J. (to Gas Council). British Patent 869,127. 31 May 1961. Absorption-desorption process. HYDROGEN SULFIDES; REMOVAL; COAL GAS; DESULFURIZATION; HYDROCYANIC ACID; PURIFICATION
- 01268 REMOVAL OF HYDROGEN SULFIDE IN LOW CONCENTRATIONS FROM GASES. Banks, R.J.H.; Newling, W.B.S. (to Gas Council). British Patent 869,131. 31 May 1961. Gas washed with aqueous suspension of Zn(OH)₂ or basic Zn carbonated in presence of alkali or alkali metal carbonate; H₂S is converted to ZnS. HYDROGEN SULFIDES; REMOVAL; TRACE AMOUNTS; ZINC SULFIDES; COAL GAS; DESULFURIZATION
- 01269 REMOVAL OF SULFUR AND NITROGEN FROM COAL-TAR AND COAL-GAS LIGHT-OIL FRACTIONS. Fowle, M.J.; Pitts, P.M., Jr.; Aristoff, E. (to Atlantic Refining Co.). US Patent 2,990,364. 27 Jun 1961. Compounds of S and N from aromatic hydrocarbon fractions produced in destructive distillation of coal removed by hydrogenation; S and N converted to H₂S and NH₃, resp.. COAL GAS; DESULFURIZATION; PURIFICATION; HYDROGEN SULFIDES; AMMONIA; ORGANIC SULFUR COMPOUNDS; ORGANIC NITROGEN COMPOUNDS; REMOVAL; AROMATICS; COAL; DISTILLATION
- 01270 REMOVAL OF CARBON DIOXIDE AND HYDROGEN SULFIDE WITH POTASSIUM CARBONATE. Owens, E.J.; Teeter, D.L. (to California Research Corp.). US Patent 2,997,366. 22 Aug 1961. CARBON DIOXIDE; HYDROGEN SULFIDES; REMOVAL; POTASSIUM CARBONATES; NATURAL GAS; SCRUBBING; PURIFICATION; DESULFURIZATION
- 01271 GAS-PURIFICATION PROCESS. Guinot, H.M. French Patent 75,439. 8 Sep 1961. Aqueous solutions of Fe(III) salts to wash out H₂S; solution contains Fe salts of propionic, acetic, and lactic acids; solution is reused after reoxidation. HYDROGEN SULFIDES; REMOVAL; AQUEOUS SOLUTIONS; IRON COMPOUNDS; WASHING; GASES; DESULFURIZATION
- 01272 COKE OVEN GAS. (to Bethlehem Steel Co.). British Patent 882,752. 22 Nov 1961. NH₃, H₂S, and HCN removed by scrubbing with waste liquor from steel pickling. COAL GAS; DESULFURIZATION; PURIFICATION; AMMONIA; HYDROGEN SULFIDES; HYDROCYANIC ACID; REMOVAL; SCRUBBING
- 01273 REMOVAL OF SULFUR OXIDES FROM GASES CONTAINING CARBON DIOXIDE. Egger, A. (to Lonza Elektrizitaetswerke und Chemische Fabriken). Swiss Patent 357,825. 15 Dec 1961. Gases from combustion of coal or during production of synthesis gas washed with aqueous (NH₄)₂SO₄, (NH₄)₂SO₃, NH₄HSO₃, and (NH₄)₂CO₃. SULFUR OXIDES; REMOVAL; CARBON DIOXIDE; SYNTHESIS GAS; PRODUCTION; COAL; COMBUSTION; AQUEOUS SOLUTIONS; WASHING; AMMONIUM COMPOUNDS; SULFATES; SULFITES; CARBONATES; DESULFURIZATION
- 01274 LABORATORY RESEARCH ON METALLURGICAL COKE PREPARED BY DESULFURIZATION OF COKE CONTAINING INORGANIC ADDITIVES BY THE ACTION OF STEAM ON CALCIUM SULFIDE. Epure, I. Rev. Electrotech. Energ., Acad. Repub. Pop. Roum.; 7: 149-60(1962). COKE; DESULFURIZATION; STEAM; SULFUR; REMOVAL
- 01275 REMOVAL OF ORGANIC SULFUR FROM GAS BY CATALYTIC CRACKING. Reinhardt, K.; Oberlaender, G.; Funke, W. Mitt. Inst. Energetik. (Leipzig); 43: 161-8(1962). Addition of molybdic acid on clay and use of Fe oxide carrier results in 75% removal of S. ORGANIC SULFUR COMPOUNDS; REMOVAL; CRACKING; CATALYSIS; BROWN COAL; COAL GAS; DESULFURIZATION
- 01276 SUITABILITY OF MIXTURES OF BOG IRON ORE AND PICKLING SLUDGES FOR REMOVAL OF HYDROGEN SULFIDE FROM GASES. Boznanski, A.; Kowalowa, S.; Falecki, M. Koks, Smola, Gaz; 7: No. 2, 63-6(1962). (In Polish). Mixtures containing 40-60% bog Fe ore and the rest pickling sludge absorb hydrogen sulfide more efficiently than does either component alone. HYDROGEN SULFIDES; REMOVAL; IRON ORES; ABSORPTION; GASES; DESULFURIZATION
- 01277 REMOVAL OF ORGANIC SULFUR COMPOUNDS FROM TOWN GAS. Mills, C.E.; Johnson, E. Inst. Gas Engrs., Publ.; 2: 664-79(1962). TOWN GAS; DESULFURIZATION; ORGANIC SULFUR COMPOUNDS; REMOVAL
- 01278 SODA-POTASH METHOD FOR ABSORBING HYDROGEN SULFIDE FROM COKE-OVEN GAS. Zarskii, P.K.; Rott, M.V.; Senyuta, V.N.; Shukh, Y.I.; Markov, A.E. Koks i Khim.; 1962: No. 4, 40-3(1962). HYDROGEN SULFIDES; REMOVAL; COAL GAS; DESULFURIZATION
- 01279 REMOVAL OF SULFUR COMPOUNDS FROM COKE GAS WITH SLUDGE FROM PRODUCTION OF POTASSIUM PERMANGANATE. Gdzlishvili, M.Y. Tr. Inst. Prikl. Khim. i Elektrokhim., Akad. Nauk Gruz. SSR; 3: 49-55(1962). Removal of COS, CS₂, RSH, C₄H₄S, and its homologs by means of sludge obtained by anodic dissolution of carbonaceous ferromanganese in KOH. COAL GAS; CARBON SULFIDES; REMOVAL; CARBON OXIDES; DESULFURIZATION; THIOLS; THIOPHENE; ORGANIC SULFUR COMPOUNDS
- 01280 PILOT-PLANT STUDIES OF THE HOT-CARBONATE PROCESS FOR REMOVING CARBON DIOXIDE AND HYDROGEN SULFIDE. Field, J.H.; Benson, H.E.; Johnson, G.E.; Tosh, J.S.; Forney, A.J. (U. S. Bur. of Mines, Pittsburgh, PA). U. S. Bur. Mines, Bull.; No. 597, 44p.(1962). Removal of CO₂ and H₂S from gas mixtures necessary in synthesizing liquid fuels from coal. PILOT PLANTS; CARBONATES; CARBON DIOXIDE; HYDROGEN SULFIDES; REMOVAL; COAL; SYNTHETIC FUELS; LIQUID PRODUCTS; COAL GAS; DESULFURIZATION; PURIFICATION; PRODUCTION
- 01281 REMOVING HYDROGEN SULFIDE FROM SYNTHESIS GAS WITH IRON OXIDE AT ELEVATED PRESSURE. Johnson, G.E.; Field, J.H.; Decker,

- W.A.; Jameson, R.M. (U. S. Bur. of Mines, Pittsburgh, PA). U. S. Bur. Mines, Rept. Invest.; No. 6323, 27p.(1962).
Use of wood chips impregnated with Fe oxide to reduce H₂S content. HYDROGEN SULFIDES; REMOVAL; SYNTHESIS GAS; DESULFURIZATION; IRON OXIDES
- 01282 SEPARATION AND RECOVERY OF HYDROGEN SULFIDE FROM GASES WITH HIGHER CARBON DIOXIDE CONTENTS. Pasternak, R. (Steinkohlengas, Dorsten, Ger.). Brennst.-Chem.; 43: 65-7(1962).
Use of alkazide solution for preliminary desulfurization of CO₂-rich gases. HYDROGEN SULFIDES; CARBON DIOXIDE; REMOVAL; DESULFURIZATION; GASES
- 01283 PURIFICATION OF GAS CONTAINING HYDROGEN SULFIDE. Guinot, H.M. British Patent 885,961. 3 Jan 1962.
Aqueous scrubbing solution containing mixture of Fe₂(SO₄)₃ and ferric salt of 1 or more of lower aliphatic acids removes H₂S by forming S. HYDROGEN SULFIDES; REMOVAL; DESULFURIZATION; AQUEOUS SOLUTIONS; SCRUBBING; IRON SULFATES; SULFUR; OXIDATION; GASES
- 01284 SELECTIVE REMOVAL OF HYDROGEN SULFIDE FROM NATURAL GAS CONTAINING CARBON DIOXIDE. Roemberg, E. (to Gewerkschaft Elwerath). German(FRG) Patent 1,122,208. 18 Jan 1962.
Method described that gives conversion of 90% of the H₂S to sulfides to leave gas with H₂S content of 1 g./m³. HYDROGEN SULFIDES; REMOVAL; NATURAL GAS; DESULFURIZATION; CARBON DIOXIDE
- 01285 DESULFURIZATION OF AROMATIC HYDROCARBONS. Benzie, R.J. (to Imperial Chemical Industries Ltd.). British Patent 889,226. 14 Feb 1962.
S impurities removed from coal tar or fractions containing C₆H₆, C₆H₅CH₃, and C₁₀H₈ in vapor phase by hydrogenation to H₂S in presence of catalyst. DESULFURIZATION; AROMATICS; HYDROGENATION; CATALYSTS; WASHING; COAL TAR; BENZENE; TOLUENE; NAPHTHALENE; SULFUR COMPOUNDS; HYDROGEN SULFIDES; REMOVAL
- 01286 REMOVAL OF ORGANIC SULFUR COMPOUNDS FROM COAL-DISTILLATION GASES. Bratzler, K.; Storp, K.; Kleemann, H. (to Laboratorium fuer Adsorptionstechnik GmbH). German(FRG) Patent 1,124,180. 22 Feb 1962.
ORGANIC SULFUR COMPOUNDS; REMOVAL; COAL GAS; DESULFURIZATION; COAL; DISTILLATION; GASEOUS PRODUCTS
- 01287 REMOVAL OF ACID COMPONENTS FROM GASES. Bratzler, K.; Gross, H.W.; Kohrt, H.U.; Thormann, K. (to Metallgesellschaft). German(FRG) Patent 1,127,533. 12 Apr 1962.
Removal of CO₂, H₂S, and HCN by washing with hot, alkaline absorption liquids that are regenerated and recycled. CARBON DIOXIDE; HYDROGEN SULFIDES; HYDROCYANIC ACID; WASHING; REMOVAL; GASES; DESULFURIZATION; PURIFICATION
- 01288 SEPARATION AND RECOVERY OF HYDROGEN SULFIDE FROM GASES. Gollmar, H.A. (to Koppers Co., Inc.). US Patent 3,030,182. 17 Apr 1962.
H₂S recovered from coal-carbonization gases by continuous absorption-desorption process. HYDROGEN SULFIDES; REMOVAL; COAL GAS; DESULFURIZATION; COAL; CARBONIZATION
- 01289 HYDROGEN SULFIDE REMOVAL FROM COAL GAS WITH FLUIDIZED IRON OXIDE. Drewery, C.C. (to Clayton Son and Co. Ltd.). British Patent 893,956. 18 Apr 1962.
Raw gas saturated with H₂O at 50-100° sent to fluidized bed of Fe oxide at 50-70°.
- HYDROGEN SULFIDES; REMOVAL; COAL GAS; IRON OXIDES; DESULFURIZATION; REGENERATION
- 01290 HYDROGEN SULFIDE FROM COKE-OVEN GAS. Gollmar, H.A. (to Koppers Co., Inc.). US Patent 3,035,900. 22 May 1962.
H₂S, HCN, and CO₂ recovered from coke-oven gas by absorption in Na₂CO₃ solution; equipment. HYDROGEN SULFIDES; COAL GAS; REMOVAL; HYDROCYANIC ACID; CARBON DIOXIDE; SODIUM CARBONATES; ABSORPTION; EQUIPMENT; DESULFURIZATION; PURIFICATION
- 01291 REMOVAL OF HYDROGEN SULFIDE FROM GAS MIXTURES. Kraus, H.; Fischer, F. (to Pintsch Bamag). German(FRG) Patent 1,132,283. 28 Jun 1962.
Removal of H₂S from CO₂-containing gases. HYDROGEN SULFIDES; REMOVAL; DESULFURIZATION; WASHING; CARBON DIOXIDE; GASES
- 01292 PURIFICATION OF FUEL GASES. (to Metallgesellschaft). British Patent 901,272. 18 Jul 1962.
Fuel gas purified at >10 atm and <-10° with organic, polar, H₂O-soluble liquids, e.g., CH₃OH or acetone. FUEL GAS; PURIFICATION; ACETONE; METHANOL
- 01293 PURIFICATION OF FUEL GASES. Becker, P.D.; Heidl, H.; Thormann, K.; Kohrt, H.U. (to Metallgesellschaft). German(FRG) Patent 1,133,497. 19 Jul 1962.
Washing with organic polar solvent such as methanol or acetone at -30°. FUEL GAS; METHANOL; ORGANIC SOLVENTS; WASHING; ACETONE; LOW TEMPERATURE; HYDROGEN SULFIDES; WATER VAPOR; PURIFICATION; DESULFURIZATION; CARBON OXIDES; CARBON SULFIDES; CARBON DIOXIDE; REMOVAL
- 01294 HYDROGEN SULFIDE REMOVAL. Reeve, L. (to United Steel Companies Ltd.). British Patent 902,138. 25 Jul 1962.
Final H₂S removal by passage through fluidized bed of hot fresh oxide. HYDROGEN SULFIDES; REMOVAL; FLUIDIZED BED
- 01295 HYDROGEN SULFIDE REMOVAL. Reeve, L. (to United Steel Companies Ltd.). British Patent 902,140. 25 Jul 1962.
Final H₂S removal by passage through one or more beds of fresh Fe or Mn oxide at 100° in auxiliary absorber. HYDROGEN SULFIDES; REMOVAL; MANGANESE OXIDES; IRON OXIDES
- 01296 CONTACT OF GASES AND FLUIDIZED SOLIDS. Bureau, A.C. (to United Steel Companies Ltd. and Henry Balfour and Co. Ltd.). British Patent 902,139. 25 Jul 1962.
Process and equipment to cause reaction between gases and fluidized solid particles particularly applicable to removal of H₂S or other S compounds from fuel gas. HYDROGEN SULFIDES; REMOVAL; FUEL GAS; DESULFURIZATION; SULFUR COMPOUNDS; EQUIPMENT
- 01297 HYDROGEN SULFIDE REMOVAL. Jowitt, R. (to Humphreys and Glasgow Ltd.). British Patent 902,256. 1 Aug 1962.
Scrubbing of gases with solution of SO₂ in ethylene sulfite. HYDROGEN SULFIDES; REMOVAL; GASES; SCRUBBING; ORGANIC SULFUR COMPOUNDS
- 01298 REMOVING HYDROGEN SULFIDE FROM COKE-OVEN GAS. Zarskii, P.K.; Markov, A.E.; Rott, M.V.; Senyuta, V.N.; Shukh, Y.I. USSR Patent 149,094. 4 Aug 1962.
Use of K and Na double salt carbonate solutions as absorbers. HYDROGEN SULFIDES; REMOVAL; COAL GAS; DESULFURIZATION; SODIUM CARBONATES; POTASSIUM
- 01299 REMOVAL OF ORGANIC SULFUR COMPOUNDS FROM GASES. (to Laboratorium fuer

- Adsorptionstechnik GmbH). British Patent 903,612. 15 Aug 1962.
Removal of S compounds at 120-400°; gases passed through cylinder containing alternating layers of Al_2O_3 and ThO_2 or CoO_2 ; H_2S oxidized to S and separated by active C. ORGANIC SULFUR COMPOUNDS; REMOVAL; EQUIPMENT; CATALYSTS; ALUMINIUM OXIDES; THORIUM OXIDES; CERIUM OXIDES; ACTIVATED CARBON; HYDROGEN SULFIDES; OXIDATION; SULFUR
- 01300 CONTINUOUS DRY METHOD FOR REMOVAL OF SULFUR COMPOUNDS FROM GASES. Mikheev, A.P.; Nikitin, D.I.; Poluboyarinov, G.N. USSR Patent 86,337. 28 Aug 1962.
REMOVAL; FLUIDIZED BED; SULFUR COMPOUNDS
- 01301 CONTINUOUS REMOVAL OF HYDROGEN SULFIDE AND HYDROGEN CYANIDE FROM ACID COKE-OVEN AND SIMILAR EFFLUENTS. Kaunert, P.; Doering, H. (to Gewerkschaft Auguste Victoria). German (FRG) Patent 1,156,284. 6 Sep 1962.
Equipment. HYDROGEN SULFIDES; REMOVAL; HYDROCYANIC ACID; EQUIPMENT; GASES; PURIFICATION; DESULFURIZATION
- 01302 CATALYTIC DESULPHURIZATION OF LIGHT DISTILLATE. Nishio, A. Japanese Patent 15,173. 8 Sep 1962. (In Japanese).
Use of V oxide catalyst at ambient or lower pressure at 420°C to remove 93% of thiophene and 100% of C disulfide. COAL TAR OILS; VANADIUM OXIDES; CATALYSTS; MEDIUM PRESSURE; THIOPHENE; CARBON SULFIDES; REMOVAL; DESULFURIZATION; HYDROGEN; CHEMICAL REACTIONS
- 01303 REMOVAL OF SULFUR, VANADIUM, AND ALKALIES FROM HEATING AND COMBUSTION GASES. Wickert, K. (to Rheinische Kalksteinwerke GmbH). Belgian Patent 614,885. 10 Sep 1962.
Gases purified by reaction with basic compounds such as CaO or MgO at 500-800°; catalysts such as Fe_2O_3 or V_2O_5 used to oxidize SO_2 to SO_3 . SULFUR; VANADIUM; CATALYSTS; IRON OXIDES; VANADIUM OXIDES; REMOVAL; FUEL GAS; DESULFURIZATION; PURIFICATION; SULFUR DIOXIDE; OXIDATION
- 01304 DESULFURIZATION OF COKE. Steinbrecher, H. (to Braunschweigische Kohlen-Bergwerke). German (FRG) Patent 1,136,979. 27 Sep 1962.
Coke preheated to 900-950° and desulfurized by mixture of H_2O vapor and CO_2 heated to 500-600°. COKE; DESULFURIZATION; LIGNITE; BITUMINOUS COAL; WATER VAPOR; CARBON DIOXIDE
- 01305 FUEL GAS. Barshchevskii, M.M.; Hezmogzin, E.S.; Zaglodin, L.S.; Sinel'nikov, A.S. USSR Patent 150,481. 11 Oct 1962.
FUEL GAS; SOLIDS; FOSSIL FUELS; EQUIPMENT; HYDROGEN SULFIDES; CARBON DIOXIDE; REMOVAL; PURIFICATION; DESULFURIZATION; OXYGEN; PYROLYSIS; GASIFICATION
- 01306 REMOVAL OF HYDROGEN SULFIDE FROM GASES AND SULFUR RECOVERY. Mitchell, D.A. (to Power-Gas Corp. Ltd.). British Patent 909,108. 24 Oct 1962.
Gas is first scrubbed with absorbent liquor (e.g., aqueous triethanolamine); residual H_2S is then removed by Fe or Mn oxide. HYDROGEN SULFIDES; REMOVAL; SULFUR; RECOVERY; SYNTHESIS GAS; ALCOHOLS; AMINES; AQUEOUS SOLUTIONS; SCRUBBING; MANGANESE OXIDES; IRON OXIDES; DESULFURIZATION
- 01307 PURIFICATION OF FUEL GASES. Landan, M.; Todhunter, K.H.; Kennaway, T. US Patent 3,061,421. 30 Oct 1962.
Removal of S compound, such as CS_2 , COS, thiols, thiophene, and H_2S , and by virtual elimination of CO. FUEL GAS; PURIFICATION; CARBON SULFIDES; CARBON OXIDES; THIOLS; THIOPHENE; HYDROGEN SULFIDES; REMOVAL; CARBON MONOXIDE; DESULFURIZATION; STEAM; SULFUR; RECOVERY
- 01308 RECOVERY OF SULPHUR IN A MARKETABLE FORM FROM FLUE GASES. Wallis, E. Brit. Chem. Eng.; 7: No. 11, 833-6 (Nov 1962).
Recovery of S by Fulham-Simon-Carves process in which flue gas reacts directly with ammonia liquor, and solution is processed to give ammonium sulfate and S. SULFUR; RECOVERY; SULFUR DIOXIDE; REMOVAL; FLUE GAS; DESULFURIZATION; AMMONIA; CHEMICAL REACTIONS; SULFATES; PRODUCTION; AMMONIUM COMPOUNDS; FULHAM-SIMON-CARVES PROCESS
- 01309 REMOVAL OF SULFUR COMPOUNDS FROM FUEL GASES. Newling, W.B.S.; Marsh, J.D.F. (to Gas Council). British Patent 909,973. 7 Nov 1962.
Removal of organic S compounds by passage of gas over catalyst of active oxide or sulfide of Fe. FUEL GAS; DESULFURIZATION; REMOVAL; ORGANIC SULFUR COMPOUNDS; IRON OXIDES; IRON SULFIDES; CATALYSTS
- 01310 INCREASING THE DESULFURIZING CAPACITY OF GAS-PURIFYING AGENTS. Rudloff, H. (to Steinkohlengas). German (FRG) Patent 1,139,473. 15 Nov 1962.
Effect of CO_2 on desulfurization. DESULFURIZATION; FUEL GAS; CARBON DIOXIDE
- 01311 DESULFURIZATION DURING COKING. Pokhvisnev, A.N.; Spektor, A.N.; Yusfin, Y.S. (Steel and Alloy Inst., Moscow). Izv. Vyssh. Ucheb. Zaved., Chern. Met.; 6: No. 7, 33-8 (1963).
By passing H, desulfurized coke-oven gas, or gaseous hydrocarbons through coke during coking, up to 54% of initial S can be removed. DESULFURIZATION; COKING; COAL GAS; HYDROGEN; HYDROCARBONS; SULFUR; REMOVAL
- 01312 REMOVAL OF HYDROGEN SULFIDE FROM COKE-OVEN GAS BY THE STRETFORD PROCESS. Nicklin, T.; Holand, B.H. Dechema Monogr.; 48: No. 835-858, 243-71 (1963). (In English).
Solutions of Na anthraquinonedisulfonate absorbed H_2S and convert it to S; vanadate improves rate of oxidation to S. HYDROGEN SULFIDES; REMOVAL; COAL GAS; DESULFURIZATION; STRETFORD PROCESS
- 01313 PURIFICATION OF COMPRESSED COKE-OVEN GAS. Baldauf, D.J. Dechema Monogr.; 48: No. 835-858, 205-16 (1963).
Oxidizer unit for removal of NO, coolers and bubble cap benzene washers, dry S remover, coolers, naphthalene washers, and low-temperature coolers to keep low point at 5°. COAL GAS; DESULFURIZATION; SULFUR; REMOVAL; EQUIPMENT
- 01314 PURIFICATION OF COMPRESSED COKE-OVEN GAS. Hoffmann, G. Dechema Monogr.; 48: No. 835-858, 229-42 (1963).
Ammonia condensation, S removal, benzene scrubbing, and separation of naphthalene and light hydrocarbons in gas at 10 to 12 atm compared with atm-pressure process. COAL GAS; DESULFURIZATION; SULFUR; REMOVAL; PRESSURE DEPENDENCE; NAPHTHALENE; BENZENE; HYDROCARBONS
- 01315 SULFUR REMOVAL FROM COKE-OVEN GAS BY THE THYLOX PROCESS. Naturalista, A. Koks, Smola, Gaz; 8: No. 3, 84-8 (1963).
COAL GAS; SULFUR; REMOVAL; DESULFURIZATION; THYLOX PROCESS; REVIEWS
- 01316 COMPLETE REMOVAL OF ORGANIC SULFUR COMPOUNDS BY THE DESOREX PROCESS. Bratzler, K.; Storp, K.; Kleemann, H. (Lurgi-Gesellschaft Chemotech. mbH, Frankfurt/M., Ger.). Dechema Monogr.; 48: No. 835-858, 285-95 (1963).
Use of series of absorption stages. ORGANIC SULFUR COMPOUNDS; DESOREX PROCESS; REMOVAL;

- ABSORPTION; STEAM; COAL GAS; DESULFURIZATION
- 01317 REMOVAL OF PYRITIC SULFUR FROM COAL BY BACTERIAL ACTION. Silverman, M.P.; Rogoff, M.H.; Wender, I. (U. S. Bur. of Mines, Pittsburgh, PA). Fuel; 42: 113-24(1963).
With small sizes of coal more than 80% of pyrites was removed; mechanism of pyrite removal by bacteria is discussed. PYRITES; SULFUR; REMOVAL; COAL; DESULFURIZATION; BACTERIA; REACTION KINETICS
- 01318 FLUIDIZED-BED DESULFURIZATION OF NONCOKING COALS. Blum, I.; Nistor, I.; Cindea-Panaitescu, V.; Ionescu, C. Rev. Electrotech. Energ., Acad. Repub. Pop. Roum.; 8: No. 1, 113-24(1963). (In English).
Air-steam treatment of noncoking coals in fluidizing chamber. FLUIDIZED BED; DESULFURIZATION; COAL; AIR; STEAM; PYRITES; SULFUR; REMOVAL
- 01319 REMOVAL BY ACTIVE CARBON OF SULFUR FROM WASTE GASES OBTAINED DURING PRODUCTION OF TOWN GAS IN THE LURGI GENERATOR. Prchlik, J. Prace Ustavu Vyzkum Paliv; 6: 138-50(1963).
S removed in 2 absorbers connected in series. ACTIVATED CARBON; SULFUR; REMOVAL; DESULFURIZATION; COAL GASIFICATION; TOWN GAS
- 01320 DESULFURIZATION KINETICS OF ENERGETIC COALS. Muntean, V.C. Acad. Rep. Populare Romine, Studii Cercetari Met.; 8: No. 3, 331-40(1963).
Steam-air mixture used under fixed-bed conditions. DESULFURIZATION; COAL; CHEMICAL REACTION KINETICS; PYRITES; STEAM; AIR; REMOVAL; ORGANIC SULFUR COMPOUNDS
- 01321 APPLICATION OF THE FOAMING COLUMN IN THYLOX-TYPE DESULFURIZATION PLANTS. Szmicek, S. (Univ. Chem. Ind., Veszprem, Hung.). Veszpremi Vegyip. Egyetem Közlemeny.; 7: No. 3, 271-80(1963).
DESULFURIZATION; THYLOX PROCESS; COAL GAS; HYDROGEN SULFIDES; REMOVAL; PILOT PLANTS; EXTRACTION COLUMNS
- 01322 DESULFURIZATION OF DONETS BASIN COALS BY FLOTATION. Migulya, P.S. Ugol; 38: No. 10, 54-6(1963).
Flotation inefficient in desulfurizing pyrite coals. COAL; DESULFURIZATION; FLOTATION; POWDERS; PYRITES; EFFICIENCY; REMOVAL
- 01323 MECHANISM OF COAL DESULFURIZATION WITH GASES. Muntean, V.C. Acad. Rep. Populare Romine, Studii Cercetari Met.; 8: No. 4, 461-71(1963).
Mechanisms and theories. COAL; DESULFURIZATION; CHEMICAL REACTION KINETICS
- 01324 APPLICATION OF FLUIDIZED BED TECHNIQUES IN GAS PURIFICATION. Chakravarty, R.K.; Banerjee, S.; Basak, N.G.; Lahiri, A. (Central Fuel Res. Inst., Jaalgora). Indian J. Technol.; 1: No. 11, 423-6(1963).
Use of Fe oxide catalyst to remove H₂S from coke-oven gas; catalyst prepared by mixing FeSO₄ (ground), Ca(OH)₂, and H₂O in rotary mixer; Fe(OH)₂ oxidizes in air to Fe₂O₃, and CaSO₄ acts as binder and carrier; description of apparatus. FLUIDIZED BED; COAL GAS; HYDROGEN SULFIDES; REMOVAL; DESULFURIZATION; IRON OXIDES; CATALYSTS; CHEMICAL PREPARATION; EQUIPMENT
- 01325 CLEANING COKE-OVEN GAS BY THE STRETTFORD PROCESS. Nicklin, T.; Holland, B.H. Gas J.; 313: 292-5, 325-6(1963).
COAL GAS; STRETTFORD PROCESS; PURIFICATION
- 01326 USE OF OXYGEN CARRIERS FROM REMOVAL OF HYDROGEN SULFIDE FROM [GENERATOR] GAS BY A WET METHOD. Regulaska, H. (Centralne Lab. Gazownictwa, Warsaw). Gaz, Woda Tech. Sanit.; 37: No. 2, 65-8(1963). (In Polish).
Hydrogen sulfide absorbed in aqueous solution carbonate and aqueous ammonia containing O carriers, such as hydroquinone, sulfohydroquinone, anthraquinone, and sulfoanthraquinones, salts of Fe, V, and Cu activated regeneration of absorbing solutions. HYDROGEN SULFIDES; REMOVAL; SODIUM CARBONATES; AQUEOUS SOLUTIONS; ABSORPTION; QUINONES; AMMONIA
- 01327 REMOVAL OF HYDROGEN SULFIDE FROM COKE-OVEN GAS IN UNPACKED TOWERS EQUIPPED WITH A CENTRIFUGAL ATOMIZER. Ganz, S.N.; Kuznetsov, I.E. (Chem.-Technol. Inst., Dnepropetrovsk). Koks i Khim.; 9: 37-42(1963).
Highly effective method. HYDROGEN SULFIDES; REMOVAL; DESULFURIZATION; COAL GAS; EQUIPMENT
- 01328 COKE DESULFURIZATION WITH REDUCING GASES. Epure, I. Acad. Rep. Populare Romine, Studii Cercetari Energet. Ser. B.; 13: No. 4, 569-80(1963).
Use of H in fixed bed and methane in fluidized bed. COKE; DESULFURIZATION; HYDROGEN; FLUIDIZED BED; METHANE
- 01329 APPLICATION OF THE STRETTFORD PROCESS TO THE REMOVAL OF HYDROGEN SULFIDE AT HIGH PRESSURE. Pyder, C.; Smith, A.V. Inst. Gas Engrs. J.; 3: No. 6, 283-95(1963). (In English).
Absorbent solution of Na anthraquinodisulfonate and Na carbonate; equipment. STRETTFORD PROCESS; HYDROGEN SULFIDES; REMOVAL; OXYGEN; RECOVERY; SULFUR; EQUIPMENT; ABSORPTION
- 01330 REMOVAL OF SULFUR COMPOUNDS FROM GASES. Reeve, L. (to United Steel Companies Ltd.). British Patent 914,398. 2 Jan 1963.
Most of H₂S and organic S compounds (except thiophene) removed from gas by passage through Zn at 350-500° after passage through hot Fe or Mn oxide layer; ZnO regenerated by heating in oxidizing atmosphere at 700-900°. REMOVAL; ORGANIC SULFUR COMPOUNDS; HYDROGEN SULFIDES; MANGANESE OXIDES; IRON OXIDES; THIOPHENE; GASES; DESULFURIZATION; ZINC OXIDES; REGENERATION
- 01331 DESULFURIZING REDUCING GASES. Lewis, W.K. (to Esso Research and Engineering Co.). US Patent 3,079,223. 26 Feb 1963.
Removal of H₂S from coke-oven gas, producer gas, water gas, and hydrocarbon gases; fluidized solid bed of Cu-SiO₂ gel used to remove H₂S by decomposition. DESULFURIZATION; HYDROGEN SULFIDES; REMOVAL; COAL GAS; PRODUCER GAS; WATER GAS; HYDROCARBONS; FLUIDIZED BED; COPPER; SILICA GEL
- 01332 ABSORBING SULFUR DIOXIDE FROM INDUSTRIAL WASTE GASES. Klinecek, R.; Jara, V. Czech Patent 106,829. 15 Mar 1963.
Presence of small amounts of Na, K, or ammonium hydroxides increases absorption of sulfur dioxide to 80-90% in comparison with 70-80% with zinc hydroxide. SULFUR DIOXIDE; ABSORPTION; SODIUM HYDROXIDES; POTASSIUM HYDROXIDES; AMMONIUM COMPOUNDS; HYDROXIDES; ZINC HYDROXIDES; COMPARATIVE EVALUATIONS; REMOVAL
- 01333 DESULFURIZING INDUSTRIAL GASES. Varshney, S.C.; Ghosh, S.C.; Banerjee, S.; Basak, N.G.; Lahiri, A. (to Council of Scientific and Industrial Research). Indian Patent 75,407. 11 May 1963.
Gas purified by passage through fluidized bed of Fe oxide catalyst. DESULFURIZATION; COAL GAS; NATURAL GAS; FUEL GAS; IRON OXIDES; CATALYSTS
- 01334 REMOVAL OF CARBON DIOXIDE AND HYDROGEN SULFIDE FROM GAS MIXTURES. (to Chemical Construction Corp.). British Patent 927,210.