L 57745-65

ACCESSION NR: AP5016781

ENCLOSURE: 01

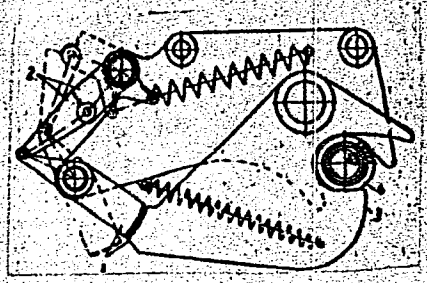


Fig. 1. Landing-gear lock

1 - Lock stops of varying length; 2 - spring-loaded hinged connectors; 3 - catch jaw with flat surface; 4 - self-orienting bushing.

Card 2/2

L 06404-67 EWT(1)/EWP(1) WW(c) GD

ACC NR: AT6029230 SOURCE CODE: UR/0000/66/000/000/0127/0133

AUTHOR: Gurakov, A. A.; Kamayev, Yu. N.; Kochurskiy, E. T.; Semenov, V. N.

ORG: none

TITLE: "Navigator" digital differential analyzer

SOURCE: Vsesoyuznaya konferentsiya-seminar po teorii i metodam matematicheskogo modelirovaniya. 4th, Kiev, 1964. Vychislitel'naya tekhnika v upravlenii (Computer technology in control engineering); trudy konferentsii. Moscow, Izd-vo Nauka, 1966, 127-133

TOPIC TAGS: digital differential analyzer, computer control system, navigation computer, flight control system, aircraft control equipment, aircraft guidance equipment

ABSTRACT: A navigational digital differential analyzer for use in aircraft is described. Such an instrument is particularly suitable for airborne applications because of its simplicity and the possibility of direct hookup with many sensors and transducers used for flight control: accelerometers, gyros, doppler velocity and angle detectors, position coordinate calculators, and various feedback devices from aircraft control mechanisms. The digital differential analyzer can be used as on-board computer if the flight trajectory is predetermined or programmed before takeoff. If the flight path is subject to in-flight variations (piloted aircraft), the DDA should be supplemented by a computer which adds considerable flexibility to the system. For instance,

Card 1/2

ACC NR: AP7005684 SOURCE CODE: UR/0413/67/000/002/0156/0157

INVENTOR: Semenov, V. N.; Kutepov, M. A.; Oleynik, S. I.

ORG: None

TITLE: A double-chamber shock absorber. Class 62, No. 190787

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 2, 1967, 156-157

TOPIC TAGS: shock absorber, hydraulic equipment

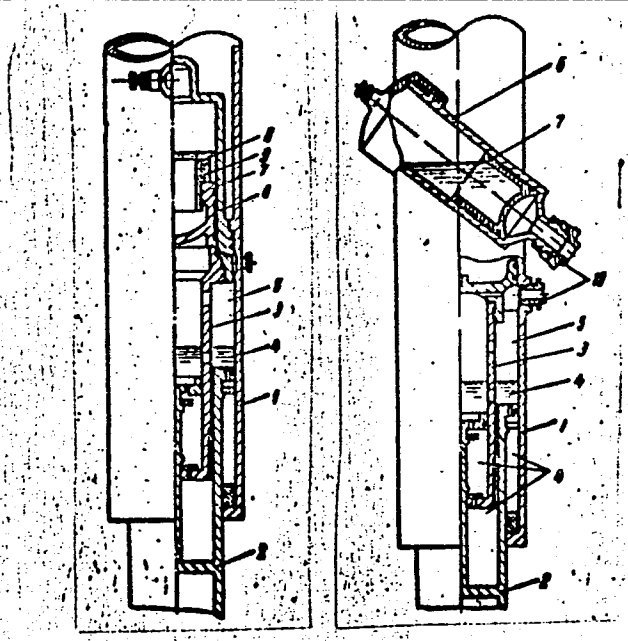
ABSTRACT: This Author's Certificate introduces a double-chamber shock absorber which contains a cylinder, piston with seal and a diffuser tube fastened inside the cylinder. The cylinder also contains main air and hydraulic chambers. The installation is designed for increased operational reliability and provision is made for variation in the characteristics of shock absorption with simultaneous reduction in overloads. The device contains an auxiliary chamber which is separate from the main chamber and is made in the form of a cylinder equipped with a floating piston which has a control nut and washer. This auxiliary chamber is located in the shock absorber cylinder above the main fluid-air chamber, or outside the cylinder and connected to it by a pipeline. The air charge in this auxiliary chamber is greater than in the main chamber.

UDC: 629.135/138

Card 1/2

ACC NR: AP7005684

1--cylinder; 2--piston; 3--diffuser tube; 4--fluid cavity; 5--air cavity; 6--cylinder of the auxiliary chamber; 7--piston with seals; 8--nut; 9--washer; 10--fitting for the connecting pipeline



SUB CODE: 13/ SUBM DATE: 09Jun65

Card 2/2

ZAKHAROV, A.G.; SEMENOV, V.N.

Automatic unit for billet heating. Mashinostroitel' no.7: 4 Jl '65. (MIRA 18:7)

SEMENOV, V.P.

Apparatus for the automatic metering of liquids in a vacuum. Khim. prom no.8:498-499 D '56. (MLRA 10:1)
(Automatic control)

SEMENOV, V.P.

Continuous production of methyl ether of ricinoleic acid.
Masl.-zhir.prom. 23 no.6:44 '57. (MLRA 10:7)

1. Kaluzhskiy kombinat sinteticheskikh dushistykh veshchestv.
(Methyl ether) (Ricinoleic acid)

BYCHKOVA, Z.N., inzh.; AGARYSHEVA, Z.I., inzh.; SHVAREV, N.M., inzh.; SEMENOV, V.P., inzh.

Vacuum rectification of lactones. Masl.-zhir. prom. 27 no.9:27-29 S '61. (MIRA 14:11)

1. Kaluzhskiy kombinat sinteticheskikh dushistykh veshchestv.
(Lactones)

VAYNSHTEYN, G.M., inzh.; SEMENOV, V.P., inzh.; MIKHAYLENKO, Yu.Ya., red.; VELITSYN, B.L., tekhn. red.

[Pneumatic units for transporting a concrete mix through pipes]Pnevmaticheskie ustanovki dlia transportirovaniia betonnoi smesi po trubam. Moskva, Orgenergostroi, 1962. 60 p. (MIRA 15:11)

1. Vsesoyuznyy institut po proyektirovaniyu organizatsii energeticheskogo stroitel'stva "Orgenergostroi." Moskovskii filial.

(Concrete--Transportation) (Pneumatic conveying)

SEMENOV, V.P.

Investigating fatigue strength of shaped wires for bearing ropes. Trudy LPI no.219:84-91 '62. (MIRA 15:12)
(Ropes—Testing)

SEMENOV, V. P. (Docent, Cand Tech Sci)

"Fatigue strength of steel construction in conveyor technology."

report submitted for Intl Conf on Conveyor Engineering & Construction Machinery, Magdeburg, E. Germany, 7-12 Sep 64.

SEMENOV, Viktor Parmenovich; YATSENKO, V.S., red.; DIZHUR, I.M., red.izd-va; LAVRENOVA, N.B., tekhn.red.

[Modern methods of repair and mounting of ship shaftings] Sovremennye metody remonta i montazha sudovykh valoprovodov. Moskva, Izd-vo "Morskoi transport," 1959. 244 p. (MIRA 12:12)
(Ships--Maintenance and repair) (Shafting)

SEMENOV, V.P., inzh.

Use of hinged joints in ship shaftings. Sudostroenie 25 no.1: 60-61 N '59. (MIRA 13:4)
(Shafting)

SEMENOV, V.P., inzh.

Use of fitted foundation bolts. Sudostroenie 25 no.10:42 O '59.
(MIRA 13:2)

(Marine engineering--Equipment and supplies)

KAPUSTIN, N.I.; SEMENOV, V.P.

Kinematics of a roller multifrequency vibrator. Trudy LPI no.254: 54-58 '65. (MIRA 19:1)

[illegible], V. P., and [illegible] Ye. P.

"New Data on the Eocene Deposits of Stalingrad Povolzh'ye," Uch. zap. Saratovsk. un-ta, vyp. geol. 37, pp 51-59, 1953

The authors consider that the scheme of Ye. V. Milanovskiy is the most acceptable scheme of the subdivision of the Eocene along the Volga. In the composition of the Tsaritsyn formation according to lithological criteria the following three formations are distinguished: Proley, Tsaritsyn, and Mechetka. The age of these layers has been determined as Upper Eocene. The authors expound their opinions variously, treating the age and stratigraphic position of the formations in the lower tertiary deposits of the Volga area. (RZhGeol. No 4, 1955)

Sum. No. 681, 7 Oct. 55

SEMENOV, V. P.

Stratigraphy of the Paleogene Deposits of the Region Between the Chirsk and Don Rivers

The author compares a new scheme proposed by him for stratigraphically separating the Paleogene deposits in the region between the Chirsk and Don rivers with the scheme of G. P. Leonov (Byull. Mosk. o-va ispytateley prirody, Otd. geol., 14, No. 4, 1936; Uch. zap. Mgu, No. 26, 1939; 11, No. 124, 1947). (RZhGeol, No. 6, 1955) Tr. Voronezhsk. un-ta. 31, 1954, 113-128.

SO: Sum. No. 744, 8 Dec 55 - Supplementary Survey of Soviet Scientific Abstracts (17)

SEMENOV, V.P.

Upper Cretaceous stratigraphy of the middle Don Valley between Kazanskaya and Yelanskaya. Trudy VGU 50:85-91 '59. (MIRA 13:12)
(Don Valley--Geology, Stratigraphic)

TUROBOVA, Z.V.; SEMENOV, V.P.

Granite-porphyry of the Upper-Emkyrchan Massif. Uch. zap. IAGU no.9:11-17 '61. (MIRA 15:7)
(Verkhoyansk Range--Granite-porphyry)

S/019/62/000/009/060/125
A154/A126

AUTHORS: Polyakov. V. S., Sul'zhenko, N. S., Semenov, V. P.

TITLE: A method of producing a lubricant for the ten-step switches of dial offices

PERIODICAL: Byulleten' izobreteniy, no. 9. 1962, 45

TEXT: Class 23c. 1_{01}. No. 146903 (724037/23 of March 30,. 1961). The method of producing a lubricant for the ten-step switches of dial offices, in which CY(SU) machine oil is thickened with aluminum monostearate, is distinguished by the fact that an ester of higher alcohols C_7 - C_9 and phthalic acid is added to the lubricant to reduce its penetration and prevent corrosion of copper in a humid atmosphere.

Card 1/1

~~5(1)~~ 5.1400

80990

S/019/60/000/04/049/315
D038/D006

AUTHORS: Sevtsov, A.I., Ovcharenko, B.G., Ivanovskiy, F.P., Semenov, V.P., Kolodeyev, I.P., Kazarnovskiy, Ya.S., Karkhov, N.V., Mikhaylov, K.V., Pavlyuchik, E.P., Pavlov, V.N. and Tsypina, A.N.

TITLE: A Reactor for the Thermo-Oxydizing Pyrolysis of Hydrocarbon Gases

PERIODICAL: Byulleten' izobreteniy, 1960, Nr 4, p 14 (USSR)

ABSTRACT: Class 12o, 19. Nr 126113 (631400/23 of 17 June 1959). The reactor consists of a mixing chamber, a burner, a reaction chamber and a heating device. To raise productivity, freely suspended pipes are rolled into the upper flange of the mixing chamber. The pipes feed oxygen in thin jets into the reaction chamber through the burner plate which has nozzles with built-in spiral eddying pieces and inlets for stabilized oxygen from a collector.

4

Card 1/1

S/019/62/000/012/051/079
A156/A126

AUTHORS: Polyakov, V.S.; Sul'zhenko, N.K.; Semenov, V.P.; Barannik, V.P.

TITLE: A method of obtaining additions to consistent lubricants, increasing their adhesion to metals and antiscoring properties

PERIODICAL: Byulleten' izobreteniy, no. 12, 1962, 49

TEXT: Class 23c, 1_{01}. No. 148188 (743721/23-5 of September 5, 1961). The method of obtaining additions to consistent lubricants, increasing adhesion to metals and antiscoring properties of the latter, is based on sulfured products. It is novel in that to obtain a less expensive addition and widen the assortment of usable raw materials, the vat residue of synthetic fatty acids is used as the required sulfured product.

[Abstracter's note: Complete translation]

Card 1/1

L 16139-65 EWT(m)/EPF(c)/EWA(d)/T/EWP(t)/EWP(b) Pr-4 IJP(c) JD/WB/DJ
ACCESSION NR: AP5000016 S/0286/64/000/021/0027/0027

AUTHOR: Sul'zhenko, N. K.; Barannik, V. P.; Polyakov, V. S.; Dubinkin, V. P.; Semenov, V. P.

TITLE: Method of preparing lubricant for titanium parts. Class 23, No. 166081.

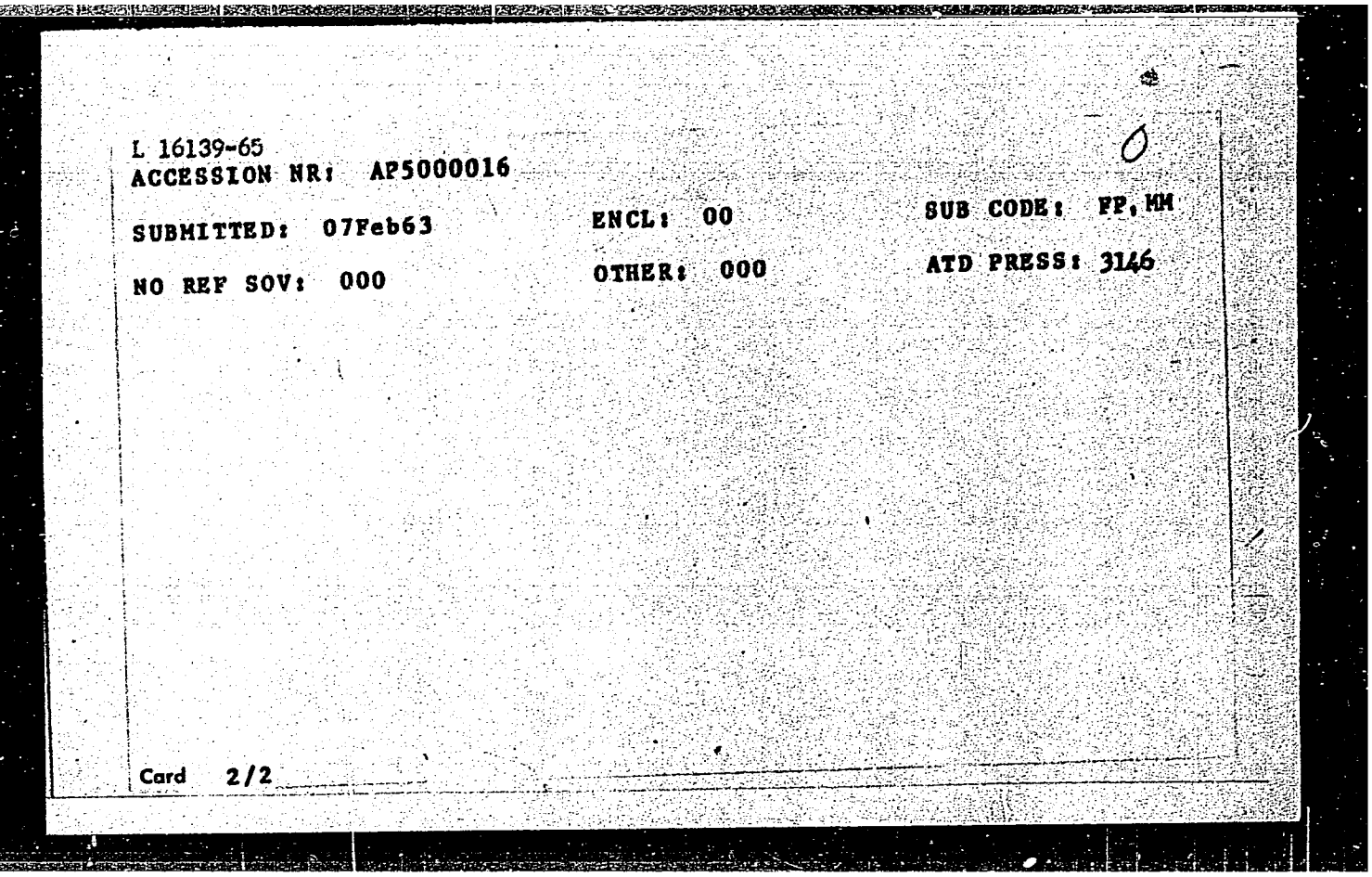
SOURCE: Byul. izobr. i tovar. znakov, no. 21, 1964, 27

TOPIC TAGS: lubricant, oleic acid lubricant, titanium part lubricant, antiseizing lubricant, anticorrosive lubricant

ABSTRACT: This Author Certificate introduces a method of preparing an antiseizing lubricant for moving parts made from titanium. The lubricant is made of oleic acid treated at 80C, to which crystallized iodine is admixed in a 1:1 ratio to increase the anticorrosion activity of the oleic acid.

ASSOCIATION: none

Card 1/2



L 16139-65
ACCESSION NR: AP5000016

SUBMITTED: 07Feb63 ENCL: 00 SUB CODE: FP, MM

NO REF SOV: 000 OTHER: 000 ATD PRESS: 3146

Card 2/2

OGLOBLIN, K.A.; SEMENOV, V.P.

Interaction of nitrosyl chloride with unsaturated compounds.
Part 16: Reaction with methyl methacrylate. Zhur. org. khim.
1 no.1:27-30 Ja '65. (MIRA 18:5)

1. Leningradskiy gosudarstvennyy universitet.

5 (3)

AUTHORS: Ogloblin, K. A., Semenov, V. P. SOV/79-29-6-51/72

TITLE: Reaction of Nitrosyl Chloride With Unsaturated Hydrocarbons (Vzaimodeystviye khloristogo nitrozila s nenasyshchennymi uglevodorodami). VI. Reaction With α-Methyl Styrene (Reaktsiya s α-metilstirolom)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 6, pp 2006-2012 (USSR)

ABSTRACT: The problem of the reaction of nitrosyl chloride with mono- and unsymmetric, double-substituted ethylenes has not been sufficiently dealt with in publications. In order to investigate the influence exercised by the substituents at the ethylene bond on the direction of the reaction, a reaction of nitrosyl chloride with α-methyl styrene was carried out. As was done already earlier (Ref 1), the reaction was carried out in ether solution with equimolecular reagents or with a small nitrosyl chloride excess. The following compounds were separated from the reaction products: the mixture of two unsaturated monochlorides (I) and (II) which cannot be separated by distillation, the compounds (III) and (IV). In some low fractions acetophenone was found. Mono- and dihalogen

Card 1/3

derivatives (I), (II), (III) are the main products, which points to the predominant effect of nitrosyl chloride on the α-methyl styrene. Apparently (I) results due to the cleavage of hydrochlorides of (III) and (II) in the chlorination of the α-methyl styrene and according to L'vov-Tishchenko (Ref 2 - Scheme 1). From the monochlorides which cannot be separated by distillation, HCl, formaldehyde, formic acid, acetophenone, and chloro acetophenone were obtained by ozonolysis (Scheme 2). The yield of compound (II) was 43 %, computed for the amounts of formaldehyde and formic acid obtained. The saponification of the monochloride fraction with alcoholic alkali lye yielded similar results. The formation of compound (IV) may be explained by scheme 3, i. e. by oxidation of the primary reaction product (V) with NOCl to propane (VI). The presence of acetophenone in the reaction products is explained by the hydrolysis of the compound in the distillation of (IV) (Scheme 4). There are 18 references, 6 of which are Soviet.

Reaction of Nitrosyl Chloride With Unsaturated Hydrocarbons. VI. Reaction With α-Methyl Styrene

SOV/79-29-6-51/72

ASSOCIATION: Leningradskiy gosudarstvennyy universitet (Leningrad State University)

SUBMITTED: May 12, 1958

Card 3/3

SEMENOV, V.P.; KAZARNOVSKIY, Ya.S.

High temperature conversion of individual hydrocarbons and their mixtures. Gaz.prom. 5 no.3:33-40 Mr '60. (MIRA 13:6)

(Gases--Analysis) (Hydrocarbons)

KAZARNOVSKIY, Ya.S.; SEMENOV, V.P.

High-temperature conversion of hydrocarbons. Gaz.prom. 5 no.7:41-50 '60. (MIRA 13:7)
(Hydrocarbons) (Oxidation)

SEMENOV, V. P., Cand. Tech. Sci. (diss) "Investigation of Process of Partial Burning of Hydrocarbons with Oxygen for Purpose of Obtaining Technical Gas for Synthesis of Ammonia, Methanol, and Higher Spirits," Moscow, 1961, 21 pp. (Moscow Chem. Engr. Inst.) 20 copies (KL Supp 12-61, 273-4).

S/064/61/000/001/002/011
B110/B215

AUTHORS: Kazarnovskiy, Ya. S., Semenov, V. P., Ovcharenko, B. G., Tsypin , A. N., Kolodeyev, I. P., Litvinchuk, V. A.

TITLE: Problems of apparatus design for the thermooxidative pyrolysis of hydrocarbon gases

PERIODICAL: Khimicheskaya promyshlennost', no. 1, 1961, 11-15

TEXT: The pyrolysis of hydrocarbon gases for the production of C_2H_2 and synthesis gas takes place at 1450-1500°C. Since the intermediate C_2H_2 must not remain in the reaction zone for more than 0.003-0.01 sec, short tongues of flame must be used. As the traditional apparatus by Sachse and Bartholomé with maximum production of C_2H_2 of 3500-5000 tons per year is no longer sufficient, a new more efficient apparatus has to be designed. Highly turbulent combustion increases the rate of flame propagation and shortens the tongue considerably. The method of methane pyrolysis applied by B.S.Grinenko yielded high C_2H_2 concentrations. Its industrial application, however, is

Problems of apparatus design for...

rendered difficult due to the almost critical velocity of the gas of 200-250 m/sec required for it, due to the high initial temperature (700-800°C) of the oxygen necessary for the combustion stabilization (7% of the total amount), and due to an increase in temperature of the reaction channel of up to 2000°C. A pilot plant for average gas velocities and efficiencies of approximately 160 Nm^3/hr is described. The conical ring nozzle of the burner contained whirl blades. The CH_4/O_2 mixture flowed into the reaction channel at 400°C and approximately 150 m/sec. The oxygen used for stabilization was only 5% of the total O_2 content. Maximum temperature in the reaction zone was 1450°C; gas velocity: approximately 100 m/sec; its stay: 0.0025 sec. The acetylene yield was 8 to 8.4% of the reaction gases plus deposition of carbon black; 3 to 3.5 g/Nm^3 of the initial mixture; ratio O_2 consumption = 0.62 to 0.64. According to the author, transition from pilot stage to industrial stage would be most suitable by increasing the number of burners. Fig. 1 shows the pilot plant of 1958. Coke oven gas of the ammonia unit compressed up to 0.36 atm by compressor (4), is purified in cloth filter (5),

Problems of apparatus design for...

and conveyed to the preheating oven (3). Industrial oxygen compressed up to 0.38 atm by a ХК -3 (ChK-3) compressor 1 is also conducted into the preheating oven via water separator (2) and filter (5). There, O_2 is heated to 350°C, and the coke oven gas to 450°C. From mixer (6), the mixture is at a temperature of 300°C conducted into burner (7) and reaction vessel (8) from which the pyrolysis gases flow out at 80-90°C. After leaving scrubber (13) where the latter were purified from carbon black, they pass the water separator and filter before they are used for the production of acetylene. The triple burner of Fig. 3 which is used by the authors, has four spirals for producing whirls. Stabilizing O_2 is conducted through their axles. The following parameters have to be observed exactly to attain an optimum course of reaction: consumption of O_2 and hydrocarbon gas, temperature of preheating, ratios $[O_2] : [\Sigma C_1]^2$ in the initial mixture, and amounts of water. The following control and regulation apparatus were used: ДПМ -270 (DPM-270), ДП-410 (DP-410), ДП-280 (DP-280), МСШ -Пр-54 (MSSh-Pr-54), ЭПП -09 (EPP-09), and 2РЛ:24В (2RL:24V) on АУС (AUS) blocks. The following average composition

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Problems of apparatus design for...

of the initial gas was determined: C_2H_4 = 3%, O_2 = 0.8%; CO = 13.8%; H_2 = 6.7%; CH_4 = 62%; N_2 = 13.7%. For stabilizing the flame, 3% of the total oxygen (79 to 98% of O_2) was required. The temperature of the reaction channel was approximatly 1350°C, that of the reactor block 100°C. The total time of reaction was 5000 hr, ratios $[O_2] : [CH_4+2C_2H_4]$ = 0.62 to 0.72. Optimum yield of C_2H_2 = 7.3%, its average = 6.9%; total cracking = approximately 30%, effective cracking approximately 30%. The adiabatic temperatures of the reaction were lower than that of the hydrogen formation according to $CO + H_2O = CO_2 + H_2$. The temperature of preheating (500°C) probably causes a reduction in O_2 consumption by 10%. The method is suited for supplementing the production of nitrogen fertilizers for which hydrogen is obtained from coke oven gases. A percentage of approximately 4 t of NH_3 per t of C_2H_2 was obtained. There are 3 figures, 2 tables, and 6 references: 4 Soviet-bloc and 2 non-Soviet-bloc.

Card 4/7

S/081/61/000/020/083/089
B110/B147

AUTHORS: Semenov, V. P., Kazarnovskiy, Ya. S., Kolodeyev, I. P., Litvinchuk, V. A.

TITLE: Conversion of heavy petroleum residues into synthesis gas

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 20, 1961, 405-406, abstract 20M103 (Gaz. prom-st', no. 2, 1961, 41-48)

TEXT: Experiments on the conversion of mazout into synthesis gas were conducted on an experimental plant (diagram given) for conversion at high temperature. The efficiency of the plant was 6.6-7.9 kg of mazout per hr. The average ratio of the linear velocities of mazout escape from the nozzle and of the vapor-oxygen mixture was ~200, the volume of the reaction space was 0.006 m^3, the temperature in the reaction zone was 1350-1450°C, and the linear velocity of converted gas in the reaction zone was 6-9 m/sec. Experimental and calculated equilibrium compositions of the reaction mixture, and comparative tables of efficiency with respect to carbon or oxygen, calculated from equations and obtained from the values of material equilibrium, are presented. It is concluded that

Card 1/2

the equations indicated for the techniques of commercial gas production from carbon raw material have a universal character. [Abstracter's note: Complete translation.]

Card 2/2

L 10692-63

ACCESSION NR: AP3001612 S/0064/63/000/004/0032/0036 44

AUTHOR: Brodyanskiy, V. M.; Leytes, I. L.; Marty*nov, A. V.; Semenov, V. P.; Estrin, S. M.

TITLE: Application of vortex effect in chemical engineering

SOURCE: Khimicheskaya promyshlennost', no. 4, 1963, 32-36

TOPIC TAGS: vortex effect, vortex tube

ABSTRACT: A survey of what has been done up to now with respect to the application of the vortex effect in chemical engineering. Authors define vortex effect as the division of gas into cold and hot flows during its expansion in the vortex tube. Various types of vortex tubes are discussed. Authors made a number of tests wherein they checked the characteristics of a vortex tube at different pressures under production-line conditions. This tube had a 40 mm diameter, two right-angled nozzles with spiral inlets. Interchangeable diaphragms of 18, 20, and 22 mm were used. The gas temperature at the inlet was 34-40C. Gas expenditure was 840-460 normal cubic meters per hour. The results are summarized in graphs which are discussed in detail. Treatment is mathematical

Card 1/2

OGLOBLIN, K.A.; SEMENOV, V.P.; SKOBLIKOVA, V.I.

Interaction of nitrosyl chloride with unsaturated hydrocarbons. Part 7: Conversion of nitrosyl chlorides of olefins to oximes of α-chloro aldehydes and α-chloro ketones brought about by the action of hydrogen chloride. Zhur.ob.khim. 33 no.3:888-896 Mr '63. (MIRA 16:3)

1. Leningradskiy gosudarstvennyy universitet.
(Nitrosyl chloride)
(Olefins) (Oximes)

L 42112-65 EPF(c)/EWP(j)/EWA(c)/EWT(m) Pc-4/Pr-4 RM S/0366/65/001/003/0401/0408

ACCESSION NR: AP5008713

AUTHORS: Ogloblin, K. A.; Semenov, V. P.

TITLE: Reaction of nitrosyl chloride with unsaturated compounds. 18. Reactions with simple vinyl ethers

SOURCE: Zhurnal organicheskoy khimii, v. 1, no. 3, 1965, 401-408

TOPIC TAGS: unsaturated compound, chloride, vinyl ether

ABSTRACT: An investigation was made of the reaction between nitrosyl chloride and vinyl ethers in a solution of diethyl ether with equimolar ratios of reagents. Reactions were obtained with methylvinyl, methylpropenyl, methylisopropenyl, and methyl-α-phenylvinyl. These vinyl ethers react energetically with nitrosyl chloride in the solution of diethyl ether at -60C with the formation of dimeric nitrosyl chlorides: 1-chloro-2-nitroso-1-methoxyethane, 1-chloro-2-nitroso-1-methoxypropane, 2-chloro-1-nitroso-2-methoxypropane, and α-chloro-β-nitroso-α-methoxyethyl benzene. During hydrolysis of 2-chloro-1-nitroso-2-methoxypropane and α-chloro-β-nitroso-α-methoxyethyl benzene, dimeric α-nitrosoketones with primary nitrose groups, previously unknown, were obtained. These dimeric α-nitrosoketones were produced in the "bis" form, indicating a "bis" form of the dimeric nitrosyl chlorides. During hydrolysis of 1-chloro-2-nitroso-1-methoxypropane and 1-chloro-2-

Card 1/2

L 42112-65

ACCESSION NR: AP5008713

nitroso-1-methoxyethane, glyoxal and methylglyoxal oximes are formed. When methyl propenyl ether reacts with nitrosyl chloride at -5C, the relatively stable trans-dimer 1-chloro-2-nitroso-1-methoxypropane is formed. At 10-15C nitrosyl chloride reacts with methylisopropenyl ethers with the formation of 2-chloro-2-methoxypropyl diazonitrate. The mechanisms of the different reactions are discussed. During the formation of nitrosyl chlorides of vinyl ethers, an ionic mechanism of addition takes place, during which the nitrosyl chloride appears as an electrophilic reagent. The formation of 2-chloro-2-methoxy-propyl diazonitrate takes place as a result of radical reaction of nitric oxide with 2-chloro-1-nitroso-2-methoxypropane. Orig. art. has: 1 table and 5 formulas.

ASSOCIATION: Leningradskiy gosudarstvennyy universitet (Leningrad State University)

SUBMITTED: 13Feb64 ENCL: 00 SUB CODE: OC, GC

NO REF SOV: 011 OTHER: 019

Card 2/2 CC

OGLOBLIN, K.A.; SEMENOV, V.P.

Interaction of nitrosyl chloride with unsaturated hydrocarbons. Part 11: Reaction with 2-chloropropene. Zhur. ob. khim. no. 5:1522-1525 My '64. (MIRA 17:7)

1. Leningradskiy gosudarstvennyy universitet.

OGLOBLIN, K.A.; KALIKHEVICH, V.N.; POTEKHIN, A.A.; SEMENOV, V.P.

Interaction of nitrosyl chloride with unsaturated hydrocarbons. Part 9: Reaction with mono- and assym. disubstituted ethylenes. Zhur.ob. khim. 34 no.1:170-181 Ja '64. (MIRA 17:3)

1. Leningradskiy gosudarstvennyy universitet.

OGLOBLIN, K.A.; SEMENOV, V.P.

Interaction of nitrosyl chloride with unsaturated compounds. Part 14: Reaction with methylallyl and methylmethallyl ethers. Zhur. ob. khim. 34 no.8:2681-2688 Ag '64. (MIRA 17:9)

1. Leningradskiy gosudarstvennyy universitet.

OGLOBLIN, K.A.; SEMENOV, V.P.

Reaction of vinyl ethers with nitrosyl chloride. Dokl. AN SSSR 155 no.1 145-148 Mr '64. (MIRA 17:4)

1. Leningradskiy gosudarstvennyy universitet im. A.A.Zhdanova. Predstavleno akademikom A.N.Nesmeyanovym.

OGLOBLIN, K.A.; SEMENOV, V.P.

Reaction of nitrosyl chloride with unsaturated compounds. Report No.18: Reactions with vinyl ethers. Zhur.org.khim. 1 no.3:401-408 Mr '65. (MIRA 18:4)

1. Leningradskiy gosudarstvennyy universitet.

YAGN, Yuliy Ivanovich; SEMENOV, V.F., otv. red.

[Abstract of lecture: for a course in the mechanics of a solid and deformable body] Konspekt lektsii po kursu mekhaniki tverdogo i deformiruemogo tela. Leningrad, Leningr. politekhn. in-t im. M.I.Kalinina. 1965 167 p. (MIRA 18:12)

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ACC NR: ~~AP6000961~~ I 9220-66 EWT(m)/T/EWP(t)/EWP(h) LIP(c) JD/WB/DJ

SOURCE CODE: UR/0286/65/000/022/0043/0043

INVENTOR: Sul'zhenko, N. K.; Barannik, V. P.; Polyakov, V. S.; Dubinkin, V. P.; Semenov, V. P.

ORG: none

TITLE: Method for preparing lubricating greases for parts from titanium and titanium based alloys. Class 23, No. 176352

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 22, 1965, 43

TOPIC TAGS: titanium, titanium alloy, lubrication, halogenated organic compound, grease, paraffin wax, hydrocarbon, antifriction metal, anticorrosion additive, chlorinated paraffin

ABSTRACT: An Author Certificate has been issued for a preparative method for lubricating greases for titanium and titanium-alloy parts. The grease is based on halogenated hydrocarbons. To enhance the antifriction properties of titanium and the anticorrosive properties of the grease, a chlorinated paraffin is thickened with solid chlorine-containing organic compounds, such as chlorinated poly(vinyl chloride) resin, hexachlorobenzene, or 70% chlorinated paraffin [sic]. [BN]

SUB CODE: 11/ SUBM DATE: 13Jan64/ ATD PRESS: 4158

Card 1/1

UDC: 621.893.002.235:546.821

OGLOBLIN, K.A.; BENENOV, V.P.

Reaction of nitrosyl chloride with unsaturated compounds. Part 23: Reaction involving 2,3,3-trichloro-2-methylpropene and 2-nitropropene. Zhur. org. khim. 1 no.8:1356-1360 Ag '65.

Reaction of nitrosyl chloride with unsaturated compounds. Part 24: Reaction involving methyl ester and nitrile of acrylic acid. Ibid.:1361-1364 (MIRA 18:11)

1. Leningradskiy gosudarstvennyy universitet.

L 43932-66 EWT(m)/EWP(w)/T/EWP(t)/ETI JP(c) JD/DJ

ACC NR: AP6029040 (A) SOURCE CODE: UR/0413/66/000/014/0056/0056

INVENTOR: Sul'zhenko, N. K.; Barannik, V. P.; Polyakov, V. S.; Semenov, V. P.; Dubinkin, V. P.

ORG: none

TITLE: Preparative method for a lubricant. Class 23, No. 183863

SOURCE: Izobret prom obraz tov zn, no. 14, 1966, 56

TOPIC TAGS: lubricant, titanium, titanium alloy, ~~methylene~~ iodide, ~~iodoform~~, iodine

ABSTRACT: An Author Certificate has been issued for a preparative method for a methylene iodide-base lubricant suitable for parts made of titanium and its alloys. To lower the friction coefficient, iodine, iodoform, or a mixture of the two is dissolved in the methylene iodide. [SM]

SUB CODE: 11/ SUBM DATE: 05Jul62/ ATD PRESS: 5061

Card 1/1 UDC: 621.892.84

SEMENOV, V.S.

B66a

"On the Comparative Studies in the U.S.S.R."

"Basic Problems of Marxist Researches on Social Structure and Changes of Social Relations."

Report presented at the 5th World Congress of Sociology, Washington, D.C., 2-8 Sep 62.

SEMENOV, V.S.; PAKHOTNOVA, V.I.

Magnetic properties of certain soils. Izv.vys.ucheb.zav.; fiz. no.1:84-86 '61. (MIRA 14:7)

1. Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosudarstvennom universitete imeni V.V.Kuybysheva.
(Soils—Magnetic properties)

SEMENOV, V.S.

Problem of extensive resections of the small intestine. Zdrav. Belor. 5 no.10:13-16 O '59. (MIRA 13:2)

1. Kafedra fakul'tetskoy khirurgii (zaveduyushchiy kafedroy - prof. P.N. Maslov) Minskogo meditsinskogo instituta.
(INTESTINES--SURGERY)

SHIKOV, V. S.

Mbr., Yakutsk Republican Hosp., -c1949-. Medicine. "Notes on Training Surgical Personnel," from "Collected Scientific Works of the Yakutsk Republic Hospital, 3, Gosizdat, Yakutsk ASSR, Khirus, Ya, No. 8, 1949. "A New Method of Cranioplasty to Correct Extensive Traumatic Defects of the Cranium," ibid; "Endemic Goiter in Olekminsk Rayon of Yakutsk ASSR," ibid.

SEMENOV, V. S.

"Echinococcosis." Sub 2 Oct 51, Central Inst for the Advanced Training of Physicians.

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55.

SEMENOV, V.S.

Results of work of the unified surgical department. Khirurgiia, Moskva no.5:71-72 May 1951. (CLML 20:9)

1. Of the Surgical Division (Head--V.S. Semenov), Yakutsk Republic Hospital (Head Physician--N.I. Kovalevska,a).

SEMENOV, V.S., zasluzhennyy vrach RSFSR, zaveduyushchiy.

Results of surgery of echinococcosis. Khirurgiia no.4:40-45 Ap '53.
(MLRA 6:6)

1. Khirurgicheskoye otdeleniye Yakutskoy respublikanskoy bol'nitsy.
(Hydatids)

SEMENOV, V.S.

Associated hepatic alveolar and hydatid echinococcosis. Khirurgiia no.6:73-74 Je '54. (MLRA 7:9)

1. Iz khirurgicheskogo otdeleniya Yakutskoy respublikanskoy bol'nitsy.

(LIVER, diseases,
*echinococcosis, assoc. of alveolar & hydatid forms)
(ECHINOCOCCOSIS,
*liver, assoc. of alveolar & hydatid forms)

SEMENOV, V.S., kandidat meditsinskikh nauk, zasluzhennyy vrach RSFSR i YaASSR.

Resection of the liver in alveolar echinococcosis. Vest.khir.74 no.1:20-25 Ja-F '54. (MLRA 7:2)

1. Iz khirurgicheskogo otdeleniya Yakutskoy respublikanskoy bol'nitsy (zaveduyushchiy otdelom - V.S.Semenov). (Liver--Hydatids)

SEMENOV, V.S., kandidat meditsinskikh nauk.

Surgical treatment of severe forms of thyrotoxic goiter.
Khirurgiia, no.11:3-11 N '55. (MLRA 9:6)

1. Zasluzhennyy vrach RSFSR i Yakutskoy ASSR. 2. Iz kliniki fakul'tetskoy khirurgii (zav.-chlen-korrespondent AMN SSSR prof. B.V. Petrovskiy) pediatricheskogo fakul'teta II Moskovskogo meditsinskogo instituta imeni I.V. Stalina.
(GOITER, surg.
in severe thyrotoxic cases)

SEMENOV, V.S., kand.med.nauk, zasluzhennyy vrach RSFSR i Yakutskoy ASSR

Treatment of Basedow's disease from data of surgical clinics in the people's democracies [with summary in English]. Khirurgiia 33 no.10: 94-104 O '57. (MIRA 11:2)

1. Iz kliniki gospital'noy khirurgii (zav. - deystvitel'nyy chlen AMN SSSR prof. B.V.Petrovskiy) I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M.Sechenova.
(HYPERTHYROIDISM, surg.
statist., analysis of results (Rus))

PETROVSKIY, B.V., prof., zasluzhennyy vrach RSFSR i Yakutskoy ASSR; SEMENOV, V.S., kand.med.nauk

Surgery of thyrotoxic goiter. Khirurgiia 33 no.12:44-52 D '57. (MIRA 11:2)

1. Iz kliniki fakul'tetskoy khirurgii pediatricheskogo fakul'teta (zav. - deystvitel'nyy chlen AMN SSSR prof. B.V.Petrovskiy) II Moskovskogo meditsinskogo instituta.

(HYPERTHYROIDISM, surg.)

SEMENOV, V.S., zasluzhennyy vrach RSFSR i Yakutskoy ASSR (Moskva)

Result of the investigation and surgical therapy of goiter in Yakut ASSR. Probl. endokr. i gorm. 4 no.5:110-115 S-O '58. (MIRA 11:12)

1. Iz gospital'noy khirugricheskoy kliniki I Mosovskogo ordena Lenina meditsinskogo instituta (dir. - chlen-korrespondent AMN SSSR prof. B.V. Petrovskiy) i khirurgicheskogo otdeleniya Yakutskoy respublikanskoy bol'nitsy (zav. - V.S. Semenov).
(GOITER,
epidemiol. in Russia & surg. statist. (Rus))

SEMENOV, V.S. [Siamionau, V.S.]

Some changes in the functional state of the stomach following extensive resections of the small intestine in dogs. Vestsi AN BSSR.Ser.biial.nav. no.2:108-114 '59. (MIRA 12:9)
(INTESTINES--SURGERY) (STOMACH)

SEMENOV, V.S., doktor med.nauk

Alveolar echinococcosis as regional pathology in the Yakutsk ASSR. Sov. med. 24 no. 2:57-62 F '60. (MIRA 14:2)

1. Glavnyy khirurg Ministerstva zdravookhraneniya Yakutskoy ASSR.

(YAKUTIA--HYDATIOS)

AL'PEROVICH, B.I.; SEMENOV, V.S.

Experience with local anesthesia with the use of neuroplegics.
Vest.khir. 85 no.9:106-109 S '60. (MIRA 13:11)

1. Iz kafedry khirurgii (zav. - prof. V.S. Semenov) Yakutskogo gosudarstvennogo universiteta i khirurgicheskogo otdeleniya (zav. - B.I. Al'perovich) Yakutskoy respublikanskoy bol'nitsy.
(LOCAL ANESTHESIA) (ARTIFICIAL HIBERNATION)

BREGADZE, I.L.; SEMENOV, V.S.

Nosogeography of the alveolar form of echinococcosis in Siberia. Med.paraz.i paraz.bol. 30 no.2:168-172 Mr-Ap '61. (MIRA 14:4)

1. Iz gospital'noy khirurgicheskoy klinik Novosibirskogo meditsinskogo instituta (dir. kliniki - prof. I.L. Bregadze) i kafedry khirurgii Yakutskogo gosudarstvennogo universiteta (zav. kafedroy V.S. Semenov).
(SIBERIA--HYDATIDS)

SEMENOV, V.S., prof. zasluzhennyy deyatel' nauki RSFSR

Results of surgical treatment of the hydatid disease. Trudy KGMI no.10:325-329 '63.

Indications and counterindications for surgical treatment of hyperthyroid and thyrotoxic goiter. Ibid.:467-472

(MIRA 18:1)

1. Iz kafedry fakul'tetskoy khirurgii (zav. kafedroy zasluzhennyy deyatel' nauki RSFSR - prof. V.S.Semenov) Kalininskogo gosudarstvennogo meditsinskogo instituta.

SEMENOV, V.S., inzh. (Leningrad)

Mechanized freight yard. Zhel. dor. transp. 47 no.8:31-32 Ag '65.
(MIRA 18:9)

GURVICH, S. Y.; SEMENOV, V. S. Engs.

Filters and Filtration

Automatization of cation filter restoration.
Elek. sta., 23, No. 5, 1952.

9. MONTHLY LIST OF RUSSIAN ACCESSIONS, Library of Congress, October 1952, Uncl.

Semenov, V.S.

96-1-17/31

AUTHORS: Gurvich, S.M. and Semenov, V.S., Engineers.

TITLE: Automation of the Operation of Pressure Filters in Water Treatment Plant at Power Stations (Avtomatizatsiya napornykh fil'trov dlya obrabotki vody na elektrostantsiyakh)

PERIODICAL: Teploenergetika, 1958, Vol.5, No.1, pp. 65 - 70 (USSR)

ABSTRACT: The main function of the staff of modern water-treatment plant in power stations is associated with regeneration of the filters. It consists largely in the laborious opening and closing of valves. The Moscow Division of the Central Boiler Turbine Institute decided to endeavour to make the process automatic. Not all the operations could be made automatic, because simple and reliable automatic analysing instruments are lacking. However, a system of automation was devised and a schematic diagram is given in Fig. 1. The essence of the system is that a group of three or four filters is served by a single automatic device which can be connected to particular filters in turn whilst the rest remain in operation. The authomatic equipment consists of three units, one for loosening and washing the filters, a second for preparing and delivering the regenerating solutions and a third for control of signalling. Clarifying filters do not require the second unit.

Cardl/3 This system has the merit of economising on automatic equipment

Automation of the Operation of Pressure Filters in Water Treatment Plant at Power Stations.

and freeing the filters of electrical instruments and wiring. The most important part required for the equipment is a valve with hydraulic drive controlled by an electro-hydraulic distribution valve and fitted with limit switches (see Fig.2). This mechanism is required for mechanical opening and closing of the main water valve. Devices already in use for similar applications were not entirely suitable and new equipment was developed. Useful suggestions about the design of hydraulic drive were made by G.S. Katkov, of Power Station No.19 of Mosenergo and the new type has been in use for over three years with complete success.

The hydraulically operated valve is controlled by a manual distributing valve, which was also re-designed. The combination of hydraulic operation of valves with a manual distribution valve and an electro-hydraulic distribution valve makes it possible to use automatic or manual control at will.

A schematic diagram of the automatic operation of ionite filters by the Central Boiler Turbine Institute system is given in Fig. 3A as applied to an automatic group of four filters, each of which has five hydraulically operated valves controlled by manual distributing valves.

96-1-17/31

Automation of the Operation of Pressure Filters in Water Treatment Plant at Power Stations.

The principles of operation of the equipment are fully described. The units for the preparation and supply of regeneration solutions, somewhat different from those for ionite filters, are also illustrated in Fig.3 and their operation explained. The control and signalling unit registers the operation of all valves and sounds an alarm if they do not open and close in accordance with the programme.
Clarifying filters are made automatic by similar equipment but the unit for preparing and delivering the regenerating solution is omitted.
Equipment of the kind described has now been installed at a power station on the Moscow system. Three factors contribute to the economic improvement that results from the use of this semi-automatic equipment: less staff are required: less reagents are used for water treatment: and capital costs are reduced because the equipment is better used.
It is hoped that it will be possible to develop automatic analysis instruments so that the operation of filters will be completely automatic. There are 4 figures.

Card3/3

ASSOCIATION: MO TsKTI
AVAILABLE: Library of Congress.

MIKHAYLOV, Vladimir Andreyevich; NOVAKOVSKIY, Nison Samoylovich; SEMENOV, V.S., red.; PANCHENKO, M.F., red. izd-va; LELYUKHIN, A.A., tekhn. red.

[Automation of purifying structures in city water-supply systems] Avtomatizatsiia vodoochistnykh sooruzhenii gorodskikh vodoprovodov. Moskva, Izd-vo M-va kommun. khoz. TSFSR, 1960. 192 p. (MIRA 14:6)

(Water--Purification) (Automation)

S/113/60/000/010/004/014
D270/D301

AUTHOR: Semenov, V.S.

TITLE: Turning of a piston ring in its groove

PERIODICAL: Avtomobil'naya promyshlennost', no. 10, 1960, 13 - 14

TEXT: Ring turning was studied in a 44 10.5/13 engine with a sharp tool, fixed in the plane of conrod motion. A ring with ground end face was placed in the first groove (with the tool). The engine was started, fed with fuel for 1 minute, and then left to run freely without fuel (average run - 23 seconds). All cycles (except suction) of ring motion in respect to the piston were recorded by the tool on the ring's surface. After stripping, the deviation of ring splits from initial position were determined and the trace on the first ring photographed under a microscope. The results indicated that the turn varies from 20 to 130°/min. with an average speed of 90°/min. A theory that the turning of the ring was due for asymmetry of the pressure with which the ring bears against the wall was checked in the following manner. The same ring was turned over and

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placed again in the groove, thus a reverse turning should have resulted, but tests did not confirm this. The effect of engine speed and pressure was checked during work with fuel at 1500 rpm as well as with the cylinder head removed and the crankshaft turned by hand. The angle of ring turn remained practically the same. A conclusion therefore was made that the ring turn depends only on the total number of turns and not the speed or pressure. A diagram of the twist of the crankpin is given. An analysis is made of this twist in relation to the inclination of the piston. The following conclusions were made. Ring turning is due to the twist of the crankpin in relation to the crankshaft axis. The angular speed of the ring increases with the former, and is proportional to the angular speed of the crankshaft. There are 4 figures and 3 references: 1 Soviet-bloc and 2 non-Soviet-bloc. The reference to the English-language publication reads as follows: Shaw and Nussdorfer, Automobile Engineering, no. 12, 1946.

SEMENOV, V.S., inzh.

Viscous fluid flow in a clearance caused by changes in the amount of the clearance. Izv.vys.ucheb.zav.;mashinostr. no.11:60-64 '60. (MIRA 14:1)

1. Odesskiy institut inzhenerov morskogo flota.
(Fluid dynamics)

PAVLOV, Ye.I.; SEMENOV, V.S.

General automatic and remote control of petroleum production enterprises. Neft. khoz. 38 no.10:5-8 O '60. (MIRA 13:9)
(Oil fields—Production methods)
(Automatic control) (Remote control)

SEMENOV, V. S.

"Electrical Modelling of Heat Transfer Processes in Internal Combustion Cylindrical-piston Engine."

Report submitted for the Conference on Heat and Mass Transfer, Minsk, BSSR, June 1961.

SEMENOV, V.S.

Electromagnetic field of a low-frequency vertical magnetic dipole situated on the surface of a conducting magnetic semispace. Izv. vys.ucheb.zav.; fiz. no.2:102-109 '61. (MIRA 14:7)

1. Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosudarstvennom universitete imeni V.V.Kuybysheva.
(Dipole moments) (Magnetic fields)

24,2400 (1160, 1482, 1147)

S/139/61/000/003/009/013
E032/E314

AUTHOR: Semenov, V.S.

TITLE: The Electromagnetic Field of a Low-frequency Vertical Magnetic Dipole Located Above the Surface of a Conducting Magnetic Half-space

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Fizika, 1961, No. 3, pp. 134 - 139

TEXT: This is a continuation of work reported by the present author in Ref. 1 (IVUZ, Fizika, 1961, No. 1). The present paper gives an analysis of the expressions obtained in Ref. 1 for the field due to a weakly-conducting, weakly-magnetic half-space when the primary source is a vertical low-frequency magnetic dipole located at a given height above the surface of the half-space. The problem considered is illustrated in Fig. 1. The vertical magnetic dipole has a moment given by $M = M_0 \exp(i\omega t)$ and is located at a distance d above the surface of a homogeneous half-space whose electrical conductivity and magnetic permeability are σ and μ, respectively. It is required to determine the secondary

electromagnetic field in the medium I (air). Neglecting displacement currents, the solutions of the problem can be expressed in terms of the Hertz function

$$\Pi'_{z1} = M_0 \int_0^\infty J_0(\lambda r)\, e^{-\lambda|z+d|}\, \frac{\lambda\mu - \sqrt{\lambda^2 - k_1^2}}{\lambda\mu + \sqrt{\lambda^2 - k^2}}\, d\lambda, \qquad (1)$$

which is related to the field components by

$$E'_{\varphi 1} = j\omega\, 10^{-8}\, \frac{\partial \Pi'_{z1}}{\partial r}, \quad E'_r = E'_z = 0; \qquad (2)$$

$$H'_{r1} = \frac{\partial}{\partial r}\left(\frac{\partial \Pi'_{z1}}{\partial z}\right), \quad H'_{z1} = \frac{\partial^2 \Pi'_{z1}}{\partial z^2},$$

where $E'_{\varphi 1}$, H'_{r1} and H'_{z1} are the components of the secondary electric and magnetic fields in air, $J_0(\lambda r)$ is the

zero-order Bessel function and $k_2^2 = -i\varkappa_2^2 = i4\pi\sigma\omega\mu\ 10^{-9}$.

In the case of a weakly magnetic medium ($\mu = 1 + \alpha$) neither Eq. (1) nor the expression

$$\Pi'_{z1} \simeq M_0 \int_0^\infty J_0(\lambda r)\, e^{-\lambda|z+d|}\, \frac{\lambda - \sqrt{\lambda^2 - k^2}}{\lambda + \sqrt{\lambda^2 - k^2}}\, d\lambda + \tag{3}$$

$$+ M_0 \alpha \int_0^\infty J_0(\lambda r)\, e^{-\lambda|z+d|}\, \frac{(2\lambda^2 - k^2)\, d\lambda}{\sqrt{\lambda^2 - k^2}\,(\lambda + \sqrt{\lambda^2 - k^2})^2},$$

which was derived in Ref. 1, is suitable. In order to obtain a more convenient solution, the integrals in Eq. (3) are now evaluated approximately by expanding a part of the integrand into a power series. The resulting formulae can be used to evaluate the modulus and phase of the secondary electromagnetic field. The formulae are

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The Electromagnetic Field ....

$$e'_{\varphi re} \simeq \frac{\alpha}{2} \frac{1}{[(z_1+d_1)^2+1]^{3/2}},$$

$$e'_{\varphi im} \simeq -\frac{p^2}{4}\left[\sqrt{(z_1+d_1)^2+1}-(z_1+d_1)\right],$$

$$h'_{zre} \simeq -\frac{\alpha}{2} \frac{2(z_1+d_1)^2-1}{[(z_1+d_1)^2+1]^{5/2}}, \qquad (7)$$

$$h'_{zim} \simeq \frac{p^2}{4} \frac{1}{\sqrt{(z_1+d_1)^2+1}},$$

$$h'_{rre} \simeq -\frac{\alpha}{2} \frac{3(z_1+d_1)}{[(z_1+d_1)^2+1]^{5/2}},$$

$$h'_{rim} \simeq \frac{p^2}{4} \frac{[\sqrt{(z_1+d_1)^2+1}-(z_1+d_1)]}{\sqrt{(z_1+d_1)^2+1}}.$$

Card 4/6

where $e(=\frac{E'_{\varphi 1}}{E^0_{\varphi}})$, $h'_z=\frac{H'_{z1}}{H^0_z}$, $h'_r=\frac{H'_r}{H^0_z}$, (6),

$z_1 = z/r$, $d_1 = d/r$; and $E^0_\varphi = -i\omega 10^{-8} M_o/r^2$, $H^0_z = -M_o/r^2$ are the components at $z = 0$ of the primary field due to a dipole located at the origin, and p is "the reduced distance" $(= k_2^2 r/\mu)$. There are 4 figures, 1 table and 2 Soviet references.

ASSOCIATION: Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosuniversitete imeni V.V. Kuybysheva (Siberian Physicotechnical Institute of Tomsk State University imeni V.V. Kuybyshev)

SUBMITTED: February 19, 1960

SEMENOV, V.S.

Designing and testing remote control devices for recovery, gathering, and field transportation of petroleum. Trudy Giprovostoknefti no.4:185-231 '61. (MIRA 16:8)
(Petroleum production) (Remote control)

RADUGIN, O.K.; SEMENOV, V.S.

Electromagnetic field of a horizontal coil situated above a conducting magnetic half-space. Izv.vys.ucheb.zav.; fiz. no.5:30-35 '61. (MIRA 14:10)

1. Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosudarstvennom universitete imeni V.V.Kuybysheva.
(Electromagnetism) (Electric coils)

SEMENOV, V.S.

Reaction of the external medium on a coil under the action of a variable current. Izv. vys. ucheb. zav.; fiz no.6:104-108 '61.
(MIRA 15:1)

1. Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosudarstvennom universitete imeni V.V. Kuybysheva.
(Electric coils)

STAROSEL'SKIY, A.A., dotsent, kand.tekhn.nauk; VASSERMAN, A.A., inzh.
SEMENOV, V.S., inzh.

Results of endurance testing of piston rings of diesel engines. Vest. mash. 41 no.3:11-15 Mr '61. (MIRA 14:3)
(Piston rings—Testing)

STAROSEL'SKIY, A.A., dotsent, kand.tekhn.nauk; VASSERMAN, A.A., inzh.; SEMENOV, V.S., inzh.

Pressure diagram and wear characteristics of heat stabilized piston rings of diesel engines. Vest.mash. 41 no.4:36-37 Ap '61. (MIRA 14:3)

(Piston rings)

KOZDOBA, L.A., kand.tekhn.nauk; SEMENOV, V.S., inzh.

Use of electrical simulation for determining the temperature field of an internal combustion engine. Izv. vys. ucheb. zav.; energ. 5 no.2:79-84 F '62. (MIRA 15:3)

1. Odesskiy institut inzhenerov morskogo flota. Predstavlena kafedroy dvigateley vnutrennego sgoraniya.
(Gas and oil engines) (Heat--Transmission)

SEMENOV, V. S.

Friction of a piston ring against a cylinder wall. Avt. prom. 28 no.6:13-15 Je '62. (MIRA 16:4)

1. Odesskiy institut inzhenerov morskogo flota.

(Piston rings) (Friction)

SEMENOV, V.S., inzh.

Calculating permissible crooks in joints of diesel-engine crankgears. Vest.mash. 42 no.4:18-22 Ap '62. (MIRA 15:4)
(Cranks and crankshafts)

SEMENOV, V.S., assistent

Corrosion wear of diesel engine cylinders. Sud. sil. ust. no.2:48-52 '63. (MIRA 17:1)

1. Odesskiy institut inzhenerov morskogo flota.

STAROSEL'SKIY, A.A. , dotsent; SEMENOV, V.S., kand.tekhn.nauk; VASSERMAN, A.A., inzh.

Interrelationship between elements of cast-iron friction pairs. Izv.vys.ucheb.zav.; mashinostr. no.8:128-132 '63. (MIRA 16:11)

1. Odesskiy institut inzhenerov morskogo flota.

L 24040-66

ACC NR: AP6011278 SOURCE CODE: UR/0413/66/000/006/0140/0140

19
B

INVENTOR: Semenov, V. S.; Chernov, Ye. G.

ORG: none

TITLE: Device for remote conversion of deflection angle of instrument indicator into a number of pulses. Class 74, No. 180116

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 6, 1966, 140

TOPIC TAGS: remote control converter, electromagnetic pulses

ABSTRACT: This Author Certificate has been issued for a device for the remote conversion of the deflection angle of an instrument indicator into a number of pulses. It consists of a scale, a rachet wheel mounted on a hollow axle through which the pin of the indicator passes, and an electromagnet. The winding of the electromagnet receives pulses from a feed line passing through diodes. To improve the reliability of the device, it has two photoresistors with light sources connected into the power circuit which feeds the electromagnet winding. One photoresistor is at the beginning of the scale and the other is mounted on the instrument-indicator pin and moves with it. A small flag is attached to the rachet-wheel axle. As pulsed power is applied to the electromagnet winding, it moves and breaks the light current from the light source to the photoresistor. [SA]

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SUB CODE: 14, 13, 09/ SUBM DATE: 27May64/ UDC: 621.3.083.72

Card 1/1 pla

L. 11039-66 EWT(d)/EWT(l)/EWP(c)/EWP(v)/T/EWP(k)/EWP(l)/EWA(h)/ETC(m) WW

ACC NR: AR6000414 SOURCE CODE: UR/0271/65/000/009/A054/A054

SOURCE: Ref. zh. Avtomatika, telemekhanika i vychislitel'naya tekhnika, Abs. 9A412

AUTHOR: Sapozhnikov, A. B.; Semenov, V. S.

TITLE: Using oscillators for purposes of flaw detection

CITED SOURCE: Dokl. Nauchno-tekhn. konferentsii, posvyashch. dnyu radio. Tomsk. Tomskiy un-t, 1964, 152-155

TOPIC TAGS: flaw detection, frequency flaw detection

TRANSLATION: Two examples of flaw detectors-oscillators intended for quality controlling metal products are cited. It has been believed that a drift in the oscillation frequency in the coil is an indicant of defect in metal. However, by means of two simple circuits differing only in the external coils into which the test piece is introduced, it is proven that a great caution should be used in detecting flaws on the frequency-drift basis (in some cases, no drift can be expected). Figs 2.

SUB CODE: 13, 09

UDC: 620.179.14

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L 7842-66 EWP(e)/EPA(s)-2/EWT(m)/EPF(c)/EWP(i)/EPA(w)-2/EWP(j)/T/EWP(t)/EWP(h)
ACC NR: AP5028134 EWA(h)/EWA(c) IJP(c) SOURCE CODE: UR/0048/65/029/011/2113/2115
JD/RM/WH

AUTHOR: Pluzhnikov, V.M.; Amirkhanov, Kh. Kh.; Semenov, V. S.

ORG: none

TITLE: Polarization of ferroelectrics under the combined influence of static and alternating electric fields /Report, Fourth All-Union Conference on Ferro-electricity held at Rostov-on-the Don 12-16 September 1964/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 29, no. 11, 1965, 2113-2115

TOPIC TAGS: ferroelectric material, ceramic material, single crystal, dielectric constant, nonlinear effect, harmonic analysis, electric field, dielectric amplifier, harmonic oscillator

ABSTRACT: Capacitors with dielectrics of VK-4M Varikond ferroelectric ceramic, monocrystalline lamellar bismuth titanate, or triglycine sulfate were excited at 50 cycle/sec in the presence of a dc bias up to 200 V and the currents through them were analyzed with a harmonic analyzer. The results are presented as curves showing the amplitudes of various harmonics of the current (up to the ninth) as functions of the applied ac voltage for different values of the dc bias. The three materials gave qualitatively similar results, the nonlinearity being greatest for triglycine sulfate. With zero dc bias no even harmonics of the current were present and the amplitudes of

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ACC NR: AP5028134

the odd harmonics increased monotonically toward saturation with increasing ac voltage. The lamellar bismuth titanate produced strong high harmonics and this material may find application in the design of frequency multipliers. Application of a dc bias caused the appearance of even harmonics, shifted the characteristic curves toward higher ac voltages, and produced maxima in the harmonics of the current higher than the first at moderate (100-200 V) ac voltages. The negative resistance due to these maxima may find application in the design of special purpose amplifiers and oscillators. For the Varikond, the third harmonic of the current varied more rapidly with the bias than the fundamental, and the fifth harmonic varied more rapidly than the third, higher gains can therefore be obtained with dielectric amplifiers by using higher harmonics. Of the three materials, the lamellar bismuth titanate had the best nonlinearity and temperature stability characteristics, but it also had the highest ferroelectric hardness and losses. The Varikind appeared to be the most advantageous material of those investigated, although its temperature range and nonlinearity were less than those of lamellar bismuth titanate. Orig. art. has: 4 figures.

SUB CODE: SS, EM, EC SUBM DATE: 00/ ORIG.REF: 000 OTH REF: 000

Card 2/2

SEMENOV, V.T.; TANANYKHIN, N.A.

Mechanization of the manufacture of heaving cards. Put' i put.khoz. 7 no.7:41 '63. (MIRA 16:10)

1. Zamestitel' nachal'nika Biyskoy distantsii puti Zapadno-Sibirskoy dorogi (for Semenov). 2. Nachal'nik putevoy kolonny Biyskoy distantsii puti Zapadno-Sibirskoy dorogi (for Tananykhin).