"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

YAKERSON, V.I.; FEDOROVSKAYA, E.A.; KLYACHKO-GURVICH, A.L.; RUBINSHTEYN, A.M.

Vapor phase catalytic ketonization of CH_3COOH over tetravalent metal oxides and BeO. Kin.i kat. 2 no.6:907-915 N-D '61. (MIRA 14:12)

1. Institut organicheskiy khimii AN SSSR.
(Acetic acid) (Ketones)
(Catalysis)

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KLYACHKO-GURVICH, G.L.

Reaction of leaves from different parts of the stem to heterosauxin as related to their ascorbic acid content. Nauch. dokl.vys.shkoly;biol.nauki no.3:150-153 '58. (MIRA 11:12)

1. Predstavlena kafedroy fiziologii rasteniy Moskovskogo gosudarstvennogo universiteta imeni M.V.Lomonosova.
(Indoleacetic acid) (Ascorbic acid) (Leaves)

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KLYACHKO-GURVICH, G.L.

Effect of heteroauxin, hydroquinone, and hydrogen peroxide on the bioelectrical potential of leaf tissues [with summary in English] Biofizika 3 no.3:306-311 '58 (MIRA 11:6)

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta im. Lomonosova.
(BIOELECTROPHYSIOLOGY OF PLANTS)
(INDOLEACETIC ACID)
(HYDROQUINONE)
(HYDROGEN PEROXIDE)

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TURKOVA, N.S.; KLYACHKO-GURVICH, G.L.

Polarity of shoots and the effect of heteroauxin on it. Biul. MOIP. Otd.biol. 64 no.6:73-86 N-D '59. (MIRA 13:5)
(POLARITY (BIOLOGY)) (INDOLACETIC ACID)
(PLANT PHYSIOLOGY)

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KLYACHKO-GURVICH, G.L.

Directed biosynthesis of carbohydrates in Chlorella. Fiziol. rast. 11 no.6:978-987 N-D '64. (MIRA 18:2)

1. Timiriazev Institute of Plant Physiology, U.S.S.R. Academy of Sciences, Moscow.

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L 45091-66 EWT(1) SOTB DD

ACC NR: AP6017350 (A,N) SOURCE CODE: UR/0326/66/013/001/0015/0024

37
36
B

AUTHOR: Klyachko-Gurvich, G. L.; Zhukova, T. A.

ORG: Institute of Plant Physiology im. K. A. Timiryazev, Academy of Sciences SSSR, Moscow (Institut fiziologii rasteniy akademii nauk SSSR)

TITLE: Changes in the biosynthesis of fatty acids due to nitrogen deficiency in Chlorella pyrenoidosa

SOURCE: Fiziologiya rasteniy, v. 13, no. 1, 1966, 15-24

TOPIC TAGS: carbohydrate, carbohydrate synthesis, Chlorella, plant metabolism, oleic acid, algae, nitrogen deficiency, hexadecadienoic acid, hexadecatrienoic acid, fatty acid

ABSTRACT: Protein synthesis in Chlorella 82 ceases under conditions of nitrogen deficiency. Carbohydrate synthesis at first increases and then ceases. The relative amount of proteins and carbohydrates drops as a result of dilution due to the intense synthesis of fatty acids under these conditions. During the second period of nitrogen

Card 1/2 UDC: 581.134.3:581.134.1/2:581.134.4

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ACC NR: AP6036768 (A,N) SOURCE CODE: UR/0326/66/013/006/0949/0957

AUTHOR: Semenenko, V. Ye.; Zimin, M. B.; Vladimirova, M. G.; Klyachko-Gurvich, G. L.; Sokolov, M. V.; Nichiporovich, A. A.

ORG: Institute of Plant Physiology im. K. A. Timiryazev, Academy of Sciences, SSSR, Moscow (Institute fiziologii rasteniy Akademii nauk SSSR); Institute of Biophysics, Academy of Sciences, SSSR (Institut biofiziki Akademii nauk SSSR)

TITLE: Photosynthetic productivity and efficient utilization of radiant energy in Chlorella as a function of spectral energy distribution in an equal-energy light field

SOURCE: Fiziologiya rasteniy, v. 13, no. 6, 1966, 949-957

TOPIC TAGS: plant metabolism, plant growth, photosynthesis, photosynthetic productivity, photosynthetic active radiation, equal energy field, energy utilization

ABSTRACT: Photosynthetic productivity and the efficiency of utilization of photosynthetically active radiation in Chlorella sp. K were studied as a function of spectral energy distribution in an equal-energy field. Evaluation was based on the biomass increase, productivity, biosynthesis of nitrogen compounds, and other factors. An equal-energy light field with an intensity of $32 \cdot 10^3$ erg/cm^2·sec was obtained by means of ND-2 neon-arc lamps and L-30 "blue" fluorescent lamps. The

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PROCESSES AND PROPERTIES INDEX

Ca

10

Preparation of cupric acetate. Z. A. IOFA AND L. L. KLYACHKO-GURVICH. *Zhur. Prikladnoi Khim.* 3, 361-5(1930).—The following method is recommended for prepg. cryst. $Cu(AcO)_2$ from CuO and AcOH. CuO is agitated with concd. AcOH for 1-2 hrs. $Cu(AcO)_2$ is formed with evolution of heat (the salt contains 1-2% CuO). The soln., which contains a considerable excess of AcOH, is sepd. from the ppt. and saved, as it is gradually used up for acidification of the soln. which is obtained at a later stage when the salt is crystd. The ppt. is mixed with the soln. which was obtained from a previous crystn. of $Cu(AcO)_2$ and heated to 80° with const. stirring. The satd. soln. thus obtained is filtered and transferred to a crystg. vessel while hot. It is then diluted with some of the soln. which was saved from the first operation. When the soln. cools to 20° about 40-45% of neutral $Cu(AcO)_2$ ppts. out. If the soln. is stirred the crystals are small and uniform. The cooled soln. is again satd. with $Cu(AcO)_2$ at 80° by repeating the procedure already described, etc. The method was successfully applied on a com. scale at Plant No. 1 of the trust "Lakokraska" in 1928.

V. KALICHEVSKY

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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PROCESSES AND PROPERTIES INDEX

Solubility of potassium fluotantalate in aqueous solutions of hydrofluoric acid. A. V. Babaeva and L. L. [illegible]. *J. Gen. Chem.* (U. S. S. R.) 5, 230-3 ([illegible]).—The soly. of K_2TaF_7 was studied at 0°, 20° and [illegible] in aq. H_2F_2 solns. in concns. of 0.105-[illegible], 0.214-[illegible] and 2.170-[illegible]%, resp. The soly. of K_2TaF_7 increases with the concn. of H_2F_2, the increase being greater the higher the temp. S. L. Madorsky

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

Solubility of cobalt nitrate in aqueous solutions of nitric acid and transition points of $Co(NO_3)_2 \cdot 6H_2O$ into $Co(NO_3)_2 \cdot 3H_2O$. A. Vaid'man and L. L. Kiryushin-Gorelik. J. Gen. Chem. (U. S. S. R.) 8, 791-4(1938).—The solv. of $Co(NO_3)_2$ in aq. soln. of HNO_3 was studied at 25° and 80°. In the case of the 25° isotherm, concns. of HNO_3 and $Co(NO_3)_2$ varied from 0 to 30.30% and from 30.87 to 2[illegible].60%, resp., and the solid phase consisted of $Co(NO_3)_2 \cdot 6H_2O$. In the case of the 80° isotherm, concns. of HNO_3 and $Co(NO_3)_2$ varied from 0 to 10.27 and from 67.[illegible] to 8[illegible].60%, resp., and the solid phase consisted of $Co(NO_3)_2 \cdot 3H_2O$. Points of transformation $Co(NO_3)_2 \cdot 6H_2O \rightarrow Co(NO_3)_2 \cdot 3H_2O$ were studied also by the dilatometric and thermometric methods; also the effect of HNO_3 concn. on the displacement of these points, by the thermometric method, in the interval 37-56°. In a neutral soln. the transition point is 54-6°, in acid soln. the points are 82°, 80°, 48°, 43° and 41° for HNO_3 concns. of 4.2, 10.4, 16.15, 20.7[illegible] and 35.57%, resp. HNO_3 affects considerably the solb. of $Co(NO_3)_2$ and H_2O in soln., particularly at 2[illegible]° and has a salting-out effect on the hydrate. On salting the soln. at 80° and then cooling to 25°, the entire soln. becomes cryst., and contains 39.5% $Co(NO_3)_2 \cdot 3H_2O$ and 60.5% $Co(NO_3)_2 \cdot 6H_2O$. On salt. the soln. at 80° and then cooling to a little above 80°, 39.5% of the $Co(NO_3)_2$ crystallizes as a trihydrate. To obtain crystals of $Co(NO_3)_2 \cdot 6H_2O$ free from $Co(NO_3)_2 \cdot 3H_2O$, a soln. conc. 62.80% $Co(NO_3)_2$ is prepd. at 80° and on cooling the entire mass crystallizes to $Co(NO_3)_2 \cdot 6H_2O$. Another way is to sat. the soln. with $Co(NO_3)_2$ at 80° (m. p. of the hexahydrate) and then cool the soln. G. L. M.

METALLURGICAL LITERATURE CLASSIFICATION

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BC

a-1

Equilibria in the system cobalt sulphate-sulphuric acid-water. L. L. Kljawschko-Gurvitsch and H. Ogandshanova (J. Gen. Chem. Russ., 1932, 5, 1781—1786).—Solubility data are recorded for $CoSO_4$ in H_2O and aq. H_2SO_4 at 0° and 20°. Crystallization of $CoSO_4,7H_2O$ is at a max. in presence of 30% H_2SO_4 at 0°, and of 20·8% at 20°. R. T.

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

Electrolytic preparation of copper oxide and salts by the permeable diaphragm method. I. L. Klyachko [illegible] *Sci. Repts. Moscow State Univ.* 1946, No. [illegible], 163-76. A Cu anode is placed between 2 cathodes, sepd. from it by double parchment membranes, into which 10% Na_2SO_4 flows at a const. rate, when $Cu(OH)_2$ is pptd. in the outflowing catholyte (optimum c. d. 0.015-0.02 amp. per sq. cm., $[Cu^{++}]$ of anolyte 0.5 N and $[NaOH]$ of catholyte 0.25-0.3 N, at 50°). The analogous optimum conditions for a NaOAc electrolyte are c. d. 0.01 amp. per sq. cm., $[Cu^{++}]$ 0.3 N, [NaOAc] 6-7% at 45°. B. C. A.

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PROCESSES AND PROPERTIES INDEX

ca

2

Vapor pressures of the binary mixtures $PbCl_2$ + $CuCl_2$ and $ZnCl_2$ + $CuCl_2$ in an atmosphere of chlorine. D. N. Tarasenkov and L. L. Klyachko-Gurvich. *J. Gen. Chem.* (U. S. S. R.) 6, 205-10(1936); cf. *C. A.* 30, 2142[illegible]. The vapor pressure of $PbCl_2$, measured by the method of [illegible] and Rosner (*C. A.* 24, 276) in an atm. of Cl in the interval 500-700° is 0.445-34.92 mm. and [illegible] mm. in a N atm. in the same temp. interval. $CuCl_2$, in an atm. of Cl at a total pressure of 760 mm., begins to dissoc. at 500°, the dissocn. increasing rapidly with temp. rise. The partial-pressure curves for $CuCl_2$ at 500° in the systems $PbCl_2$ + $CuCl_2$ and $ZnCl_2$ + $CuCl_2$ pass through a max. corresponding for both systems to a compn. of approx. 50:50. A satisfactory explanation for the phenomenon is not offered. Vapor pressure of binary mixtures of $ZnCl_2$ + $PbCl_2$ in an atmosphere of chlorine. D. N. Tarasenkov and A. V. Babaeva. *Ibid.* 311-14. The vapor pressure of pure anhyd. $ZnCl_2$ in an atm. of Cl, detd. by the method given above, is 40 mm. at 516°, 120 mm. at 604° and 380 mm. at 600°. By use of the same method the partial pressures in a Cl atm. of $PbCl_2$ (I) and $ZnCl_2$ (II) in mixts. of 17.5% I + 82.5% II, 40.5% I + 59.5% II, and 82.1% I + 17.9% II are detd. at 20°, 516° and 604°. In both cases the vapor pressure of $ZnCl_2$, much higher than that of $PbCl_2$, varies markedly with the rate of Cl passage and has to be extrapolated to zero rate.

John Livak

METALLURGICAL LITERATURE CLASSIFICATION

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CO

2

A theory of the formation of catalytically active "ensembles" on surfaces. I. N. I. Kobozev. *Acta Physicochim. U. R. S. S.* 9, [illegible]-44([illegible])(in English).—Assuming that the active layers of the catalytic activity is an amorphous adsorbed phase organized into ensembles obeying the laws of d. fluctuation, K. develops a theory that explains the optimum activity for [illegible] syntn., dispersity, and temp. of prepn. and for the effect of promoters and the order of introduction of the reacting substances. The cryst. carrier deta. only the no., but not the properties, of the ensembles. An equation is given for the max. activities of two catalysts. This equation helps to account for the change in the order of catalytic reactions. Cf. Kobozev and Nekrasov, *C. A.* 26, 1980. II. An application of the theory to the synthesis of ammonia and to the catalytic and electrocatalytic hydrogenation of the ethylene bond. N. I. Kobozev and [illegible] Khrushkin-Gurevich. *Ibid.* 10, 1-84([illegible])(in English).—On the basis of their own expt. data as well as that from other authors and using the equation previously derived (cf. preceding abstr.) K. and K.-O. calc. the av. no. of atoms in active ensembles to be 3 Fe for the reaction $N_2 + 3H_2 = 2NH_3$ (cf. K.-O. and K.); 3 Pt for $2H_2 + O_2 = 2H_2O$ (cf. Dashev and Kochetkov, *C. A.* 26, [illegible] and 8410f); 2Pd for fumaric acid hydrogenation (cf. Sokolitschko and Zimmermann, *C. A.* 34, [illegible]); 4Pt or 4 Ni for $C_2H_4 + H_2 = C_2H_6$ (cf. Dashev, *C. A.* 27, [illegible]); 3 Fe or 3 Pt for the electrocatalytic hydrogenation of cinnamic acid (according to Menshikova, Kobozev and Philippovich) in the presence of traces of $HgCl_2$ and K_2AsO_4 catalyst poisons as activators. For reactions of H_2 with diamed. mols., the ensembles contain 3 atoms, for addn. to the C=C bond they probably contain 3-4 atoms. The promoting action of Fe_2O_3 in synthetic ammonia catalysts is explained as a result of the pre-existing three-atom iron ensembles in Fe_2O_3, that of Al_2O_3 to a protecting action against melting or evaps. of the ensembles. F. H. Rathmann

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

KOBOZEV, N. I.; KLYACHKO-GURVICH, A.A.

"A Theory of the Formation of Catalytic Active Groupings on Surfaces --II. The Application of the Theory to the Synthesis of Ammonia and the Catalytic and Electrocatalytic Hydrogenation of the Ethylene Bond"; Zhur. Fiz Khim., 12, No. 1, 1939. Moscow State University, Laboratory of Inorganic Catalysis. Rcd. 29 May 1938.

Report U-1613, 3 Jan. 1952

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1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

Cd

18

Regenerating the iron catalyst for the synthesis of ammonia. N. I. Kobozev and L. I. Klyachko-Gurvich. Russ. 38,334, Jan. 31, 1940. The spent catalyst is treated with iron carbonyl at temps. sufficiently high for the decompn. of carbonyl to metal and CO to form an active layer.

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PROPERTIES AND PROPERTIES INDEX

Theory of formation of catalytically active ensembles on [illegible]. III. Catalytic properties of iron on charcoal and asbestos supports used for ammonia synthesis. L. L. [illegible] and N. I. Kobozev. *J. Phys. Chem.* (U. S. S. R.) 14, [illegible]; cf. *C. A.* 35, 2401[illegible].—Catalytic activity of a substance depends chiefly on its chem. compn., whereas its mode of propn. is of little importance. Fe catalysts produced by reduction of Fe_2O_3, or by heating charcoal or asbestos soaked in $Fe(CO)_3$, have similar efficiencies if the percentage p of Fe in the mixed catalysts is high enough. The efficiency $k = xv^{1/2}$, where x is the NH_3 concn. in the outgoing gas and v its rate of flow. k increases with p, and k/p passes through a max. which for charcoal lies at $p = 0.005$, 0.055 and 0.55 for 450°, 400° and 350°, and for asbestos at $p = 0.7$ for 400° and 450°. k/p for charcoal is greater than for asbestos because of the high surface area of charcoal. When the catalyst is kept at 500°, k decreases, and the rate of decrease is virtually the same for Fe without support, on charcoal, and on asbestos, showing that the "active ensembles" are identical in all three types. If the N_2H_4 mixt. contains y wt.-% of O, $xy^{1/2}$ is const., and the values of the const. for pure Fe and Fe on charcoal are almost identical.

B. C. P. A.

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6

Ca

Interaction of cobalt oxides with sulfur oxides. L. I. Klyachko-Gurvich, T. I. Bulgakova, and Ya. I. Gerasimov. Zhur. Obshchei Khim. (J. Gen. Chem.) 18, 1590-9 (1948).—Pure CoO or NiO is completely converted to sulfate at 600° by repeatedly pulverizing the compds. in the pressure of mixts. of SO_2 and O_2. However, it is simpler to carry out the reaction not quite completely without pulverizing, and then ext. the sulfates formed with water. Fe_2O_3 is a catalyst for the reaction. Data are given for v.ps. of the various sulfates at various temps. For $CoSO_4$, the total pressure in mm. is 0.10 at 600°, 23 at 800°, 1,300 at 1000°, while the pressure of $NiSO_4$ at the same temps. is 0.33, 81, and 5880 mm. Arild J. Miller

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CA

2

Reduction of cobalt ferrite with hydrogen. Yu. P. [illegible], I. [illegible], and Ya. I. Gerasimov (Moscow State Univ.). *Zhurnal Fizicheskoi Khimii*, 1 [illegible], No. 10, 2[illegible] (1931). *Sov. Fiz.-Khim. i Fizicheskaya Nauk* No. 7.—An expt'l study was made of the change of phase compn. during reduction of Co ferrite, $CoFe_2O_4$. This material was made by ppt'g. a soln. of $CoCl_2$ and $FeCl_3$ in the necessary ratio with a hot NaOH soln. and boiling for 30 min. The ppt. was washed, dried at 120°, heated 4 hrs. at 400-500°, and then heated 4 hrs. at 900° in vacuum. Reduction was done in a horizontal furnace in a flow of H_2. In tests (1)-(4) the ferrite was placed in an open boat and was reduced at 700°. In tests (5) (11) the ferrite was placed in quartz tubes, drawn out at both ends but open. To obtain more even reduction the tube furnace was rotated from time to time and the powder was mixed. Reduction was done at 500°. The % reductions were: test (1) 2.8%, (2) 4.7, (3) 6.3, (4) 8.23, (5) 9.0, (6) 12.2, (9) 17, (10) 22.8, (11) 36. Powder x-ray patterns were made of the reduced specimens with 25 kv. and an Fe anode. With 25 wt. % KCl as a source of standard lines, an error of ± 0.001 to 0.002 A. was achieved. The amts. of ferrite, oxide, and metal, resp., in M % were: test (1) 81, 5, 14; (2) 67, 5, 28; (3) 54, 10, 36; (4) 35, 13, 52; (7) 13, 13, 74; (8) 7, 5, 87; (9) 5, 3, 92; (10) 3, 2, 95; (11) 1, 1, 98. These values agreed fairly well with the percentage reductions. From the change in lattice const. of the ferrite, oxide, and metallic phases it appeared that reduction of the Fe occurred more rapidly than did reduction of the Co. A Co-rich metallic phase appeared at low % reductions, whereas an Fe-rich phase appeared at high % reductions. The presence of the 3 phases (ferrite, oxide, and metal) rather than only 2 even after a homogenizing treatment showed that the reduction reaction occurs by some.

A. U. Guy

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KLYACHKO-GURVICH, L. I.

L. I. Klyachko-Gurvich, T. I. Fulgakova and Ya. I. Gerasimov, The reaction of the oxides of cobalt with the oxides of sulfur. F. 1947.

In this work mixtures of SO_2 and air were passed over the cobalt oxides. Attention was paid to the character of the sulfating products, to the composition of the sulfating gas and also to the influence of a number of factors, including the various additions to the sulfating oxide.

Lab. of Chem. Thermodynamics Moscow State University
November 19, 1946

SO: Journal of General Chemistry (USSR) 25, (90) No. 9 (1947)

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KLYACHKO-GURVICH, L. L.

KLYACHKO-GURVICH, Lippa L'vovich; GERASIMOV, Ya.I., professor, ~~redaktor; GERASIMOV, Ya.I.~~, redaktor; MIKHAYLOVA, T.A., tekhnicheskiy redaktor.

[Cryoscopy; laboratory work in physical chemistry] Krioskopiia; prakticheskie raboty po fizicheskoy khimii. Pod red. IA.I. Gerasimova. [Moskva] Izd-vo Moskovskogo univ., 1955. 21 p. (MLRA 8:12)

1. Chlen-korrespondent AN SSSR (for Gerasimov).
(Cryoscopy)

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RUBINSHTEYN, A.M.; SLOVETSKAYA, K.I.; KLYACHKO-GURVICH, A.L.; BRUYEVA, T.R.

Adsorption of cyclohexane on a chromia-alumina-potassium catalyst. Dokl. AN SSSR 151 no.2:343-346 Jl '63. (MIRA 16:7)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR. Predstavleno akademikom B.A.Kazanskim.
(Cyclohexane) (Adsorption) (Catalysts)

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

Klyachkov, A. P.

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 8, p 267 (USSR) 15-57-8-11804

AUTHOR: Klyachkov, A. P.

TITLE: Mining of a Thick Inclined Layer with Hydraulic Equipment in Fushun, Chinese National Republic [Razrabotka moshchnogo plasta naklonnogo padeniya s gidrozakladkoy v Fushune (KNR)]

PERIODICAL: Nauch. tr. po vopr. gorn. dela. Mosk. gorn. in-t, 1956, Sb 16, pp 115-125

ABSTRACT: One of the thickest (up to 120 m) coal strata in the world lies in the district near the city of Fushun, China. It is located approximately 40 km to the north-east of the city of Mukden. This coal stratum is mined both by the open pit and by underground methods (the mines of Laokhy-tay, Shun-li, Lun-fyn and others). The author considers only the underground method of

Card 1/2

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

15-57-8-11804

Mining of a Thick Inclined Layer (Cont.)

extraction of the mineral resources. These consist of: the uncovering of the mining districts; preparation of the approaches; preliminary removal of methane from the formation which is unique in its high gas potential; clearing and retaining operations. The article includes approximate plans of mine workings with inclined and vertical shafts. It also describes the geological structure of the formation and the mining operations in the center of the mining district, together with the approximate length and cross section of the latter. Some technical and economic data are included, and the progress of the coal mining industry in the Chinese Peoples' Republic during the last five years is described.

A. A. Kostyn

Card 2/2

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

KLYACHNIKOV, V.M., kand. sel'khoz. nauk; GOLUBEV, I.F., kand. sel'khoz. nauk; SHLEPANOV, V.M., red.

[Apparatus and equipment for demonstration farms] Pribory i oborudovanie dlia oporno-pokazatel'nykh khoziaistv. Moskva, Sel'khozizdat, 1962. 183 p. (MIRA 17:10)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

KLYAGIN, G.I. (Tbilisi)

Maria Mikhailovna Kotova. Med.sestra, no.9:30 S '55.
(BIOGRAPHIES,
Kotova, Mariia M.) (MLRA 8:11)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

FA 159T8

USSR/Electronics - Vacuum Tubes
Magnetrons

May 50

"The Magnetron," L. Klyagin, 2½ pp

"Radio" No 5

Describes and illustrates construction and operation of magnetron invented in 1940 by N. F. Alekseyev and D. Ye. Malyarov, who first obtained 9-cm oscillations with power up to 300 w. Deals mostly with simple well-known facts on magnetron design and operation.

159T8

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

KLYAGIN, L.

PA 164T72

USSR/Radio - Vacuum Tubes
Magnetrons

Jun 50

"The Magnetron," L. Klyagin

"Radio" No 6, pp 29-32

Continues article in "Radio" No 5, May 50. Describes structure and oscillatory processes of magnetrons, effect of phase focusing on mutual repulsion of electrons, etc. Discusses magnetron in very general terms. Does not include pertinent data on Soviet types.

164T72

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

KLYAGIN, L. Ye

KLYAGIN, L. Ye. - "Transient Processes in the Tube-Auto-Oscillator." Sub 10 Apr 52, Moscow Electrical Engineering Inst of Communications. (Dissertation for the Degree of Candidate in Technical Sciences).

SO: Vechernaya Moskva, January December 1952

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

KLYAGIN, L.E.

USSR/ Electricity - Wattmeters

Card 1/1 Pub: 133 - 4/18

Authors : Klyagin, L. E., Cand. of Tech. Sc.

Title : The high frequency wattmeter.

Periodical : Vest. svyazi 2, 8 - 9, Feb 1955

Abstract : Announcement is made by the Moscow Electrical Engineering Institute about the development of a new type wattmeter for measuring transmitter capacitances of up to 10kw in a 15 - 90 wave range. The measuring part of the instrument is connected to the feeder at the transmitter output and the indicator part can be installed on the transmitter panel. The principle circuit diagram of the wattmeter is described. The instrument, after some minor modification, can also be used for measuring voltage and current in the feeder and the coefficient or cos of the traveling waves. Diagrams; graphs;

Institution: .....

Submitted: .....

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

KLYAGIN, L. E.

L. E. Klyagin, "Joint single-sideband amplitude-phase modulation." Scientific Session Devoted to "Radio Day", May 1958, Trudrezervizdat, Moscow, 9 Sep 58.

The distortion arising in a Kan modulator circuit is estimated. Investigations show that significant distortion arises in the circuit for modulation coefficients close to 100 percent. An analysis is made of the operation of other circuits and it is shown that undistorted modulation can be obtained for a modulation coefficient of 100 percent and higher.

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

82869

S/108/60/015/008/006/006
B012/B067

6.4500

AUTHOR: Klyagin, L. Ye., Member of the Society

TITLE: Analysis of Spectra in Amplitude-phase Modulation

PERIODICAL: Radiotekhnika, 1960, Vol. 15, No. 8, pp. 67-73

TEXT: In 1938-1939, S. I. Tetel'baum (Refs. 1,2,3) suggested a new system of radio transmission which he termed "optimum amplitude-phase modulation". A satisfactory circuit for obtaining oscillations with optimum amplitude-phase modulation has hitherto not been found. In practice only R. L. Kahn's circuit (Ref. 5) is used. However, also this circuit produces no optimum modulation. In the present paper, this circuit is analyzed. The requirements which must be met by the main elements of the transmitter constructed according to Kahn's circuit are estimated. This circuit is compared with the known circuit of quadrature modulation. Figs. 1 and 2 show the block diagrams of transmitters with a single-sideband amplitude-phase modulation; Fig. 1: Kahn's circuit, Fig. 2: circuit of the so-called quadrature modulation. Both circuits are based

Card 1/2

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

82869

Analysis of Spectra in Amplitude-phase Modulation

S/108/60/015/008/006/006
B012/B067

on the same idea. The main difference consists in the fact that the phase modulation of the carrier frequency is realized by different methods and according to different laws. The spectra for an amplitude-phase modulation are studied, and exact formulas of computation are derived. By means of these formulas, the quality of a modulated signal obtained at the output of a transmitter which is constructed according to Kahn's circuit can be judged. It is shown that this circuit as well as the circuit of quadrature modulation give no satisfactory results and cannot be recommended in this form. It is pointed out that the formulas obtained only hold if the amplifier of phase-modulated oscillations and the amplitude modulator produce no frequency or phase distortions. Furthermore, it is shown that, if these conditions are not fulfilled, sideband suppression becomes worse. Hence, these results may be regarded as the maximum possible ones for this circuit. There are 5 figures and 6 references: 4 Soviet and 2 British.

SUBMITTED: July 2, 1958 (initially)
November 11, 1959 (after revision)

Card 2/2

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

KLYAGIN, L.Ye, prepod.; SHTEYN, B.B., prepod.; BOGOSLOVSKIY, Yu.V., prepod.; KALASHNIKOV, N.I., prepod.; TERENT'YEV, B.P., prepod.; ROZENTSVEYG, I.Ye., prepod.; VASIL'YEV, Ye.K., prepod.; PETROV, V.F., prepod.; SHUMILIN, M.S.; GALOYAN, M.A., red.; SLUTSKIN, A.A., tekhn. red.

[Radio transmitting devices]Radioperedaiushchie ustroistva. Moskva, Svias'izdat, 1962. 710 p. (MIRA 16:4)

1. Kafedra radioperedayushchikh ustroystv Moskovskogo elektrotekhnicheskogo instituta svyazi (for all except Shumilin, Galoyan, Slutskin).
(Radio—Transmitters and transmission)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

ACCESSION NR: AP4015257 S/0106/64/000/002/0036/0040

AUTHOR: Klyagin, L. Ye.

TITLE: Phase-difference circuit with ladder connection of RC sections

SOURCE: Elektrosvyaz', no. 2, 1964, 36-40

TOPIC TAGS: phase difference circuit, RC phase shifter, broadband phase shifter, sideband separation, phase shifter calculation, lattice network

ABSTRACT: A method for the calculation of an RC-circuit phase shifter (see Enclosure 1) is proposed. It is shown that the transfer constant of any section of the shifter scheme is independent of frequency with any values of h and g. It is estimated that the above phase shifter can develop two output voltages in quadrature, with an error of 0.7° or less within 80-8,000 cps; the shifter attenuation is 18 db or less. The component numerical values are reported. It is claimed that an experimental hookup worked adequately at a frequency band much wider than

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

ACCESSION NR: AP4015257

the rated 80-8,000 cps; measured with an error within 3°, the phase shift was 90°. Orig. art. has: 2 figures and 10 formulas.

ASSOCIATION: none

SUBMITTED: 12Feb63 DATE ACQ: 12Mar64 ENCL: 01

SUB CODE: CO NO REF SOV: 002 OTHER: 000

Card 2/2

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

L 17889-65 EWT(1)/EEC(m)/EWA(h) Peb ASD(a)-5/AFDC(b)/ESD(dp)/ESD(t)
ACCESSION NR: AP5000375 S/0108/64/019/011/0048/0052

B

AUTHOR: Klyagin, L. Ye. (Active member)

TITLE: Calculation of broadband transducers which produce two voltages with a constant phase difference

SOURCE: Radiotekhnika, v. 19, no. 11, 1964, 48-52

TOPIC TAGS: transducer, two voltage transducer

ABSTRACT: A bifurcated network (transducer), each branch consisting of cascade-connected RC-quadripoles, is considered. As the complexity of quadripoles grows rapidly with their number, a network with 3 quadripoles in each branch (Fig 4) is regarded as all-purpose; the network permits obtaining two quadrature voltages with an error of 0.2° within a frequency range $F_{max}/F_{min} = 500$. Less complicated networks can be evolved by omitting certain parts of the original one. Formulas for design coefficients are developed; by

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

L 17889-65
ACCESSION NR: AP5000375

using them, all resistors and capacitors can be calculated; their permissible error is 0.1%. Illustrating the use of the formulas, a numerical example of a transducer with $F_{max}/F_{min} = 280$ developing quadrature voltages with an error of ±6' is given. Orig. art. has: 4 figures and 20 formulas.

ASSOCIATION: Nauchno-tekhnicheskoye obshchestvo radiotekhniki i elektrosvyazi (Scientific and Technical Society of Radio Engineering and Electrocommunication)

SUBMITTED: 25Dec62 ENCL: 00

SUB CODE: EC NO REF SOV: 002 OTHER: 000

Card 2/2

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

L 39379-65 EWT(1)/EWA(h) Pe-4/Pab

ACCESSION NR: AP5005580 S/0106/65/000/002/0034/0041

AUTHOR: Klyagin, L. Ye.

12
B

TITLE: Wideband RC phase inverters

SOURCE: Elektrosvyaz', no. 2, 1965, 34-41

TOPIC TAGS: phase inverter, RC phase inverter, wideband phase inverter

ABSTRACT: Wideband RC phase inverters for separating sideband frequencies in phase-difference devices are investigated. Two possible circuits are devised, and inverter characteristics and the selection of inverter elements are calculated. The calculations are verified on an experimental model: frequency range, 80—8000 cps; $\varphi = 90°$; attenuation, ~ 17 db; load elements, R = 50 kohm and C = 4000 μμf. Output voltages remained unchanged over the entire frequency range, with an error less than 1%; the phase difference varied from 90° by less than 1°. Comparison with LC phase inverters indicates that the latter require coils of high inductance in place of the resistors; the largest RC inverter capacitor is 0.058 μf, while the largest LC inverter capacitor would have to be 7.5 μf with the largest inductance at 2.7 h. Orig. art. has: 5 figures and 19 formulas. [DW]

Card 1/2 Submitted: 17 June 64

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

L 55218-65 EEO-2/EWT(d)/EEC-4/EED-2 Pa-4/Pae-4

ACCESSION NR: AP5009817 UR/0106/65/000/003/0041/0046

621.376.:2

AUTHOR: Klyagin, L. Ye.

22
B

TITLE: Automatic control in a bridge-type balanced modulator

4

SOURCE: Elektrosvyaz', no. 3, 1965, 41-46

TOPIC TAGS: balanced modulator, frequency converter, carrier suppression

ABSTRACT: An improved circuit is suggested for a balanced modulator which is conventionally used in single-band frequency converters. The introduction of an automatic control brings about a more complete suppression of the carrier which remains practically constant under the influence of various factors affecting the semiconductor-diode-bridge balance. The conditions of carrier suppression are theoretically analyzed. By adding a few capacitors and resistors, the cutoff angles are controlled in such a way that the carrier-frequency current flowing in the load remains small when the diode parameters vary. An experimental verification revealed that the automatic-control feature increases the carrier suppression by 20 db (from 40 to 60 db). Orig. art. has: 6 figures, 18 formulas, and 1 table.

Card 1/2

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

L 55218-65

ACCESSION NR: AP5009817

ASSOCIATION: none

SUBMITTED: 18May64 . ENCL: 00 SUB CODE: EC

NO REF SOV: 002 OTHER: 000

Card 2/2

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

ACC NR: AR6026405 SOURCE CODE: UR/0274/66/000/004/A016/A016

AUTHOR: Klyagin, L. Ye.

TITLE: Calculation and analysis of RC-quadripoles intended for broadband phase shifters

SOURCE: Ref. zh. Radiotekhnika i elektrosvyaz', Abs. 4A105

REF SOURCE: Tr. uchebn. in-tov svyazi. M-vo svyazi SSSR, vyp. 26, 1965

TOPIC TAGS: quadripole, phase shifter, electric network, RC circuit

ABSTRACT: New materials about RC-quadripoles is systematized, and a simple method for calculating quadripoles having a uniform frequency characteristic and a specified phase is developed. Several quadripole configurations containing minimum numbers of elements are compared in this respect: it is impossible to create other quadripoles with identical characteristics which would have fewer number of elements. Fundamental design formulas and an advice for their use are given. Five figures. Bibliography of 4 titles. L. S. [Translation of abstract]

SUB CODE: 09

Card 1/1 UDC: 621.372.5

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

KLYAGIN, V.I., insh.

Organizing the repair of metal-cutting equipment. Vest. mashinostr. 45 no. 12:74-77 D '65 (MIRA 19:1)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

L 27913-66 EWT(d)/EWP(1) JT

ACC NR: AP6017730 SOURCE CODE: UR/0122/66/000/003/0083/0084

AUTHOR: Klyagin, V. I. (Engineer)

ORG: none

32
B

TITLE: Eighth all-union conference on equipment repair

SOURCE: Vestnik mashinostroyeniya, no. 3, 1966, 83-84

TOPIC TAGS: mechanical engineering conference, machine tool industry

ABSTRACT: The article is a report on the Eight All-Union Scientific and Technical Conference on Problems in the Organization of Equipment Repair held in Tashkent, 7-10 December 1965. The conference was convened by the Central and Uzbek Republic Administrations of NTO Mashprom (Scientific and Technical Society of the Machine Building Industry). The conference was attended by 496 delegates from various organizations. Reports were given by the Experimental Scientific Research Institute of Metal-Cutting Machine Tools; the Institute of Economics, Academy of Sciences Kazakh SSR; the Computer Center of Gosplan Belorussian SSSR and the Leningrad Institute of Engineering Economics on Development of Repair and Preventative Maintenance for Equipment. It was pointed out at the conference that intensification is needed in research on theoretical problems of maintenance and sections were organized for studying maintenance economics and technology in the leading scientific research institutes and in the Committee on Science and Technology. Problems were also discussed involving improvement of methods for paying workers in the repair services and the effect of these methods on improving labor productivity. It is concluded that piece-rate and job-rate payment should increase the incentive of workers to improve the state of equipment, reduce time lost in breakdowns and do a better repair job. [JPRS]

SUB CODE: 13 / SUBM DATE: none

Card 1/1 BLG

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

5(3), 5(4) SOV/79-29-8-73/81

AUTHORS: Grinev, A. N., Klyagina, A. P., Terent'yev, A. P.

TITLE: Investigations in the Field of Quinones. XXVII. Synthesis of the Arylnaphthoquinones and Their Reactions With Sodium Cyanide

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 8, pp 2773 - 2777 (USSR)

ABSTRACT: Until recently the question of the influence of the electric donor-acceptor properties in the quinone nucleus upon the reactivity, the type of process, and its orientation remained unsolved. The difficulties encountered in the work are due to the fact that the reactions of the quinone series are, as a rule, accompanied by side reactions, an isomerization and decomposition of the intermediate products, and by redox processes. The non-existence of preparative synthesis methods of the substituted p-quinones also have an effect. In the present paper the synthesis of the compounds (V)-(VIII) from the aryl-1,4-benzoquinones (I)-(IV) and divinyl according to the method developed by Grinev and cooperators (Ref 1):

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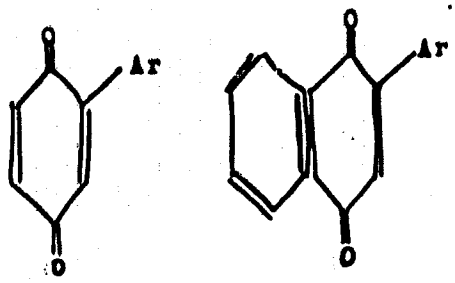
APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

Investigations in the Field of Quinones. XXVII. Synthesis of the Arylnaphthoquinones and Their Reactions With Sodium Cyanide SOV/79-29-8-73/81



where (I) Ar=C_6H_5
(II) Ar=$C_6H_4CH_3$-n
(III) Ar=$C_6H_4OCH_3$-n
(IV) Ar=$C_6H_4NO_2$-n
(V) Ar = C_6H_5
(VI) Ar=$C_6H_4CH_3$-n
(VII) Ar=$C_6H_4OCH_3$-n
(VIII) Ar=$C_6H_4NO_2$-n

The aryl-1,4-benzoquinones (I)-(IV) were synthesized with high yields by the arylation of the n-benzoquinone with diazo compounds in a way different from the German patent (Ref 2) only by adding sodium acetate to the quinone solution even before mixing with the diazo compound. The authors assume that the effect of the aryl substituent might favor the reaction of electric donor-acceptor affiliation. Therefore the reaction

Card 2/3

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

Investigations in the Field of Quinones. XXVII. Synthesis SOV/79-29-8-73/81
of the Arylnaphthoquinones and Their Reactions With Sodium Cyanide

of the 2-aryl-1,4-naphthoquinones with NaCN was carried out (Scheme 1). This reaction took place by a gradual addition of the quinones dissolved in dioxan to the aqueous-alcoholic solution of the sodium cyanide in a nitrogen gas bag. The binding of NaCN to compound (III) is particularly easily effected. For the other 2-aryl-1,4-naphthoquinones small amounts of resins form in the reaction. At the reaction of m-benzo-1,4-naphtho- and 2-methyl-1,4-naphthoquinone with NaCN no cyanohydroquinones were separated. The structure of the 2-aryl-3-cyanonaphthohydroquinones was confirmed by oxidation into the corresponding quinones, analysis, and qualitative reactions (Scheme 2) (4 Tables). There are 4 tables and 7 references, 2 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

SUBMITTED: July 2, 1958

Card 3/3

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

KOCHETKOV, N.K.; KUDRYASHOV, L.I.; KLYAGINA, A.P.

Monosaccharides. Part 2: Reaction of methyl-2,3-anhydro-4,6-benzylidene-α-D-alloside with sodium malonic ester. Zhur. ob.khim. 32 no.2:410-413 F '62. (MIRA 15:2)

1. Institut khimii prirodnykh soyedineniy AN SSSR.
(Monosaccharides)
(Malonic acid)

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

S/078/60/005/010/012/021
B004/B067

AUTHORS: Sobolev, B. P., Klyagina, I. P.

TITLE: Synthesis and Investigation of Single Crystals of the Luminophore $(Zn,Be)_2SiO_4$

PERIODICAL: Zhurnal neorganicheskoy khimii, 1960, Vol. 5, No. 10, pp. 2294-2299

TEXT: In an earlier paper (Ref. 2), the authors observed and described "transportation effects" in the synthesis of Be_2SiO_4 from BeO and SiO_2 by means of fluorine containing mineralizers. Single crystals of Be_2SiO_4 were formed from the gaseous phase. The same effect was used in the present work. Single crystals of $(Zn,Be)_2SiO_4$ were crystallized from the gaseous phase of the system ZnO - BeO - SiO_2 - mineralizer at 1200°C. Table 1 gives the results of preliminary experiments made for determining appropriate mineralizers. The synthesis of willemite with the addition of NaF, BeF_2, and Na_2BeF_4 is studied, and the latter compound was found to be suited for further experiments. A mixture of ZnO and BeO at a molar ratio

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

of 0.5 : 1 to 3 : 1 as well as of SiO_2 and 3 - 5% Na_2BeF_4 were heated to 1200°C (Table 2). A reaction mass and a "sublimate" were formed, which at distances from 5 - 8 cm formed up to 6 mm long single crystals on the cold walls of the quartz ampoule (Fig.). The reaction products were studied by optical crystal and X-ray photographic methods. The reaction mass consisted of two crystalline phases differing in their refractive indices. The phase with the smaller refractive index could be identified as phenacite, that with the higher one as a solid solution, $(Zn,Be)_2SiO_4$, which crystallized in willemite structure. A comparison was made between natural willemite supplied by the Mineralogicheskiy muzey Akademii nauk SSSR (Mineralogical Museum of the Academy of Sciences USSR) and willemite synthesized from ZnO and SiO_2. The composition of the "sublimate" depended on the ratio ZnO : BeO. Phenacite was formed at ZnO : BeO = 0.5 : 1 to 2 : 1. At ZnO : BeO = 3 : 1, the crystals consisted of $(ZnO,BeO)_2SiO_4$. Table 3 gives the roentgenographically determined lattice constants. The values a_0 = 13.80 kX, c_0 = 9.24 kX were obtained for the unit cell. Willemite synthesized from ZnO and SiO_2 had the values a_0 = 13.92 kX,

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

Synthesis and Investigation of Single Crystals of the Luminophore $(Zn,Be)_2SiO_4$

S/078/60/005/010/012/021
B004/B067

c_0 = 9.30 kX (Table 4). The authors pointed out that the terms "transportation effect" and "sublimate" give only a vague description of the complex process. Actually, there are no silicate molecules in the gaseous phase. Transportation probably takes place in the form of fluorine compounds as described in Ref. 2. The authors thank A. V. Novoselova for supervision of the work. There are 1 figure, 4 tables, and 4 references: 2 Soviet, 1 British, and 1 German.

SUBMITTED: July 9, 1959

Card 3/3

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

L 19208-63 EWP(k)/EWP(q)/EWT(m)/BDS AFFTC/ASD Pf-4 MJW/JD/JG/MLK(a)
ACCESSION NR: AP3007584 S/0286/63/000/010/0050/0050 13

AUTHOR: Krivenko, R. A.; Fridlyander, I. N.; Klyagina, N. C.; Khrenkin, M. L.; Spektorova, S. I.; Gritsenko, V. G.; Golovchanskiy, B. V.; Firyulin, B. D.

TITLE: Sintered aluminum alloy. Class 40, No. 154670

SOURCE: Byul. izobret. i tovarny*kh znakov, no. 10, 1963, 50

TOPIC TAGS: sintered aluminum base alloy, sintered aluminum silicon silicon carbide alloy

ABSTRACT: The patent introduces a sintered aluminum-base alloy containing silicon. To improve ductility, 10—15% silicon and 20—30% silicon carbide are added.

ASSOCIATION: none

SUBMITTED: 13Jun62 DATE ACQ: 14Oct63 ENCL: 00

SUB CODE: ML NO REF SOV: 000 OTHER: 000

Card 1/1

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

KLYAGINA, N. I.

Fur Trade

Tasks of the fur industry in 1952. Leg. prom., No. 1, 1952.

9. Monthly List of Russian Accessions, Library of Congress, March 1953, Uncl.

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

SHAKHET, Grigoriy Pinkhusovich; KLYAGINA, N.I., red.; SHAROV, N.V., red.; MINAYEVA, T.M., red.; MEDVEDEV, L.Ya., tekhn.red.

[Handbook on the fur and sheepskin industry] Spravochnik po mkhovoi i ovchinno-shubnoi promyshlennosti. Vol.3. [Equipment] Oborudovanie. 1959. 367 p. (MIRA 12:12)
(Hides and skins--Handbooks, manuals, etc.)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

KLYAGINA, N.I.

ZUBIN, A.M., kand.biolog.nauk; KUZNETSOV, B.A., prof., doktor biolog. nauk; MOZHKOV, A.N., kand.sel'skokhoz.nauk; PURIM, Ya.A., kand. tekhn.nauk; CHATSKIY, P.I., kand.tekhn.nauk; SERGEYEVA, T.A., kand.tekhn.nauk; BARYKIN, A.M., kand.tekhn.nauk; LOSEVA, N.L., kand.tekhn.nauk [deceased]; RUMYANTSEV, M.Z., starshiy nauchnyy sotrudnik [deceased]; LAPIDUS, L.G., starshiy nauchnyy sotrudnik; FRENKEL', Ye.B., kand.tekhn.nauk; KHMEL'NITSKAYA, Ye.G., mladshiy nauchnyy sotrudnik; KATAYEV, V.P., kand.ekonom.nauk; KLYAGINA, N.I., red.; MARTYNOV, S.F., red.; MINAYEVA, Z.M., red.; PLEMYANNIKOV, M.N., red.; KHAKHIN, M.T., tekhn.red.

[Manual on fur and sheep pelt garment manufacture] Spravochnik po mekhovoi i ovchinno-shubnoi promyshlennosti. Vol.2.[Raw materials. Semifinished and final products. Production technology] Syr'e. Polufabrikaty i izdeliia. Tekhnologiia proizvodstva. 1959. 631 p. (MIRA 13:3)

1. Nauchno-issledovatel'skiy institut mekhovoy promyshlennosti (NIIMP) (for Rumyantsev, Lapidus).
(Hides and skins) (Fur--Handbooks, manuals, etc.)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

KLYAGINA, N.I.

Development of the fur and sheepskin coat industry during the period 1959-1965. Kosh.-obuv.prom. no.1:15-19 Ja '59. (MIRA 12:6)

1. Direktor Nauchno-issledovatel'skogo instituta mekhovoy promyshlennosti.
(Fur) (Coats)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

KLYAGINA, N.I.

Apply chemistry in the fur industry. Kozh.-obuv. prom. 6 no.8:23-26 Ag '64. (MIRA 17:10)

1. Direktor Vsesoyuznogo nauchno-issledovatel'skogo instituta mekhovoy promyshlennosti (VNIIMP).

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137-1958-2-2694

KLYAGINA, N.S.

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 2, p 71 (USSR)

AUTHORS: Fridlyander, I.N., Zahkarov, Ye.D., Podsechinov, A.V., Klyagina, N.S., Solov'yeva, V.V.

TITLE: Air-cooled and Water-cooled Round Ingots Cast From Alloy V95 (an Aircraft Aluminum Alloy) (Issledovaniye kruglykh slitkov splava V95, otlitykh s okhlazhdeniyem vodoy i vozdukhom)

PERIODICAL: V sb.: Metallurg. osnovy lit'ya legkikh splavov. Moscow, Oborongiz, 1957, pp 5-46

ABSTRACT: A study was made of the structure and properties of air-cooled and water-cooled cast round ingots (370 mm in diameter) and of sections obtained from them. Water cooling was found to enhance the quality and evenness of the mechanical properties and to reduce formation of liquation bands; on the other hand, water cooling would impair the corrosion resistance of the sections and intensify the formation of liquation burls on the ingots. Ingots of alloy V95 should be water-cooled.

G.S.

Card 1/1 1. Alloys—Ingots—Properties—Determination

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

KLYAGINA, N. S. Cand Tech Sci -- (diss) "Study of the effect of oxide impurities upon the properties of aluminum alloys of the and development of methods of refinery ~~purification~~." Mos, 1959. 19 pp including cover. (Min of Higher Education USSR. Krasnoyarsk Inst of Nonferrous Metals im M. I. Kalinin. Chair of "Foundry Production"), 150 copies (KL, 41-59, 104)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

KLYAGINA, N.S.

Effect of aluminum oxides on certain aluminum alloy properties. Izv.vys.ucheb.zav.; tsvet. met. 2 no.1:106-112 '59. (MIRA 12:5)

1. Moskovskiy institut tsvetnykh metallov i zolota. Kafedra liteynogo proizvodstva.

(Aluminum alloys--Testing)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

SPASSKIY, A.G.; KLYAGINA, N.S.

Cleaning metals from nonmetallic inclusions. Izv. vys. ucheb. zav.; tsvet. met. 2 no.3:118-122 '59. (MIRA 12:9)

1.Moskovskiy institut tsvetnykh metallov i zolota, Kafedra liteynogo proizvodstva.

(Aluminum founding) (Filters and filtration)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

18(5)

SOV/128-59-4-13/27

AUTHOR: Spasskiy, A.G., Doctor of Technical Sciences, and Klyagina, N.S., Engineer

TITLE: Refining Metals from Non-Metallic Inclusions

PERIODICAL: Liteynoye Proizvodstvo, 1959, Nr 4, pp 30-32 (USSR)

ABSTRACT: Impurities of cast iron caused by non-metallic inclusions are found in two forms; on the one hand as separate inclusions and one the other as small particles evenly distributed in the metal. Inclusions of the first kind are very dangerous. They diminish the compactness and durability of the castings and are the cause of leaks during the hydraulic tests. The inclusions appear in the casting after the plastic transformation. Their origin is different; they consist of oxide films mixing with the metal, of air bubbles, which get into the casting during the molding, and of carbides, nitrites, fluxes, and other inclusions of a complex composition. Unfortunately the existing methods to detect defects cannot be used to check the fluid metal in regard to inclusions like these. They

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are discovered only in the latter stages of production. The common methods of chemical analysis fail in the detection of the different non-metallic inclusions. Very little is known about the second kind of inclusions mentioned above. They usually do not make it necessary to sort out the casting. It was also determind, what influence the particle suspended evenly in the founding has on the structure and qualities of the alloys. The impurity of the metal by heterogenous inclusions is a great drawback. Under usual circumstances, however, it can hardly be avoided. For this reason, methods to refine the metal have to be found. This is already done with refining agents. A considerable purification is accomplished by chlorination. Aluminum oxide, however, has to extracted from the metal by arenaceous quartz, while fluid aluminum is used to reduce the silicon dioxide. To control the degree of impurity and of the following refinement a structural test is carried out. The aluminum oxide is found by a chemical analysis. Fluxes are also used in the refining process. In cupolas of

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Refining Metals from Non-Metallic Inclusions SOV/128-59-4-13/27

big capacity fluxes only have a small effect. In this case, it is more practical to filter the metal through a material which absorbs the non-metallic inclusions. Tests with filtration are being continued. There are 2 diagrams, 2 photographs and 8 references, 6 of which are Soviet and 2 German.

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

L 8913-65 EWT(m)/EPR/T/EWP(k)/EWP(q)/EWP(b) Pf-4/Pm-4 RAEM(t)/ASD(m)-3/
AFWTR/RSD/APTC(p) MJW/JD

ACCESSION NR: AT4012729 S/2911/63/000/002/0169/0174

AUTHOR: Fridlyander, I. N.; Agarkov, G. D.; Klyagina, N. S.; Krivenko, R. A. B

TITLE: Preparation of standard aluminum alloys by the powder method

SOURCE: Alyuminiyevy*ye splavy*. Sbornik statey, no. 2, Spechenny*ye splavy*. Moscow, 1963, 169-174

TOPIC TAGS: powdered aluminum, powder metallurgy, aluminum alloy, mechanical property

ABSTRACT: V96 and D16 aluminum alloys, prepared by a newly developed powder method, were tested for the effect of homogenization, thermal treatment, Al_2O_3 admixture, and structural changes on their mechanical properties. The 3-stage powder process consists of cold powder briquetting at a maximum pressure of 100 kg/mm^2 for 1.0-1.5 min., hot briquet precompressing and rod compacting at 400C for 1.5-2.0 hrs. The effect of thermal treatment was found to depend on the Al_2O_3 content and was found to increase the strength of both alloys when the Al_2O_3 content is low. Homogenization reduced, to a certain degree, the strength of V96. Powdered alloys prepared by atomization were of a higher quality than those prepared by mixing the individual components. The smaller the powder particles, the higher the mechanical properties of D16, while V96 was not affected. Techno-

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ACCESSION NR: AT4012729

logically, powdered V96 and D16 with aluminum content in excess of 10% are nearly equal to SAP; they resemble in behavior ordinary cast alloys when the aluminum content is low but have a more homogeneous structure. The microstructure of both alloys is discussed and is found to be highly dispersed and homogeneous. Orig. art. has: 2 tables, 2 figures and 5 graphs.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00

SUB CODE: MM NO REF SOV: 000 OTHER: 000

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L 40956-66 EWT(m)/EWP(k)/EWP(e)/EWP(t)/ETI IJP(c) JH/JO/WW/JD

ACC NR: AT6024930 SOURCE CODE: UR/2981/66/000/004/0202/0207

AUTHOR: Palatnik, L. S.; Fedorov, G. V.; Klyagina, N. S.; Krivenko, R. A.; D'yachenko, S. S.; Fridlyander, I. N. (Doctor of technical sciences)

ORG: none

52

B+1

TITLE: Obtaining highly dispersed metal powders by vaporization in argon

SOURCE: Alyuminiyevyye splavy, no. 4, 1966. Zharoprochnyye i vysokoprochnyye splavy (Heat-resistant and high-strength alloys), 202-207

TOPIC TAGS: metal powder, ultra fine powder, powder metal production, VAPOR CONDENSATION, ALUMINUM POWDER

ABSTRACT: Certain processes associated with the condensation of metal vapors in an inert-gas atmosphere have been investigated. It was found that in the argon atmosphere, condensation of metal vapors takes place in a limited space-condensation zone. The size of the condensation zone decreases with increasing vaporization rate and inert-gas pressure. On an experimental scale, ultrafine powders of several metals were obtained. The magnesium, cadmium, and zinc powders had an average particle size of 0.001 mm; the particle size of copper and aluminum powders was 0.00005. The size of copper and aluminum particles does not depend very greatly on the variation in the rate of vaporization and the pressure of inert gas. Orig. art. has: 7 figures. [TD]

SUB CODE: 11 / SUBM DATE: none/ ORIG REF: 006/ ATD PRESS: 5057

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

L 40991-66 EWP(e)/EWT(m)/EWP(t)/ETI/EWP(k) IJP(c) JH/MJW/JD

ACC NR: AT6024935 (N) SOURCE CODE: UR/2981/66/000/004/0232/0237

AUTHOR: Komissarova, V. S.; Kireyeva, A. F.; Klyagina, N. S.; Krivenko, R. A.

ORG: none

TITLE: Corrosion resistance of the new sintered aluminum alloys

SOURCE: Alyuminiyevyye splavy, no. 4, 1966. Zharoprochnyye i vysokoprochnyye splavy (Heat-resistant and high-strength alloys), 232-237

TOPIC TAGS: aluminum alloy, ANODIZATION, ALLOY COMPOSITION, ~~dispersion strengthened metal~~, high strength alloy, sintered ~~aluminum powder~~ alloy, corrosion resistance / SAS aluminum alloy

ABSTRACT: The corrosion behavior of six SAS series aluminum alloys (see Table 1) was tested in a 3% solution of NaCl + 0.1% H_2O_2 for 22 days, and also in the atmosphere of an industrial area for 3 years. Simultaneously, D16 and AK4 aluminum alloys were tested for comparison. Some SAS-1 alloy specimens were anodized and some were anodized and varnished. The corrosion susceptibility was evaluated from the weight loss and from the drop in strength and ductility. It was found that the corrosion resistance of SAS-1 and SAS-3 alloys in the industrial atmosphere was equal to that of AK4 alloy, with a loss of strength of

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L 40991-66

ACC NR: AT6024935

Table 1. Composition of SAS aluminum-base alloys.

Alloy	Chemical composition, %											
	Si	SiC	Ni	Cr	Zn	Mg	Cu	Zr	Fe	Li	Mn	Ti
SAS-1	29,15	—	3,85	—	—	—	—	—	—	—	—	—
SAS-1	30,0	—	7,0	—	—	—	—	—	—	—	—	—
SAS-1	30,0	—	5,0	—	—	—	—	—	—	—	—	—
SAS-1	31,6	—	5,1	—	—	—	—	—	—	—	—	—
SAS-3	22,8	—	—	2,2	—	—	—	—	—	—	—	—
SAS-4	13,4	16,25	—	—	—	—	—	—	—	—	—	—
D16	0,3	—	—	—	0,6	—	4,8	—	0,2	—	1,4	—
AK-4	—	—	1,3	—	—	1,6	2,1	—	1,4	2,1	—	0,09

23.3—27.4% for the former and 28.6% for the latter in 3 years and a weight loss of 0.0017—0.0030 g/cm^2 for the former and 0.0029 for the latter. In the 22-day test in a 3% solution of sodium chloride, the SAS-1 alloy strength loss amounted to 60.5—63.0% and the weight loss to 0.377—0.480 g/cm^2. Corresponding figures for D16 alloy were 11.9% and 0.063 g/cm^2 and for AK4 alloy, 24.2% and 0.063 g/cm^2. SAS-4 alloy, however, after 40 days in a 3% sodium chloride solution, showed no changes in strength and ductility. Anodizing and anodizing with varnishing greatly improved the corrosion resistance of SAS-1 and lowered the strength loss by a factor of 1.5 and 5—6, respectively. Orig. art. has: 3 figures and 5 tables. [TD]

SUB CODE: 11 / SUBM DATE: none/ ATD PRESS: 5057

Card 2/2 11b

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

ACC NR: AT6024933 SOURCE CODE: UR/2981/66/000/004/0219/0223

AUTHOR: Krivenko, R. A.; Klyagina, N. S.; Tsabrov, N. D.; Fridlyander, I. N.

ORG: none

TITLE: Properties of a sintered aluminum alloy with a low linear expansion coefficient

SOURCE: Alyuminiyevyye splavy, no. 4, 1966. Zharoprochnyye i vysokoprochnyye splavy (Heat resistant and high-strength alloys), 219-223

TOPIC TAGS: sintered alloy, aluminum alloy production / SAS-1 sintered alloy

ABSTRACT: A process was developed for pressing sintered aluminum alloys (SAA) with low linear expansion coefficients, specifically, the SAS-1 alloy, and the properties of the latter were studied. Analysis of the plastic properties showed that the plasticity maximum of SAS-1 is located in the 530-450°C range, and that the plasticity is markedly affected by the temperature and rate of deformation: as the latter increases, the plasticity decreases. In subsequent studies, a process for briquetting and pressing semifinished products from SAA was developed. The effect of temperature, pressure, time of holding under pressure during briquetting, temperature and degree of deformation during pressing, rate of discharge of the metal, various types of lubricants, etc. on the compactability, mechanical properties, and structure of the alloy was determined. SAS-1 was found to soften slowly with rising temperature, and to have

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ACC NR: AT6024933

the same strength at 400°C as one of the most heat resistant aluminum materials, SAP-1. Preliminary tests showed SAS-1 to have the lowest coefficient of friction as compared to other aluminum alloys: without anodic coating, 0.25 (dry friction); with anodic coating, 0.25 (dry friction). Orig. art. has: 2 figures and 2 tables.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 001

Card 2/2 mt

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

S/191/60/000/012/012/016
B020/B066

AUTHORS: Atoyan, K. M., Klyagina, T. A.

TITLE: Application of Glass-reinforced Plastics in the Construction of Automobile Bodies

PERIODICAL: Plasticheskiye massy, 1960, No. 12, pp. 41 - 43

TEXT: At the promyshlennaya vystavka (Industrial Exposition) in Moscow in 1958, a "Moskvich" automobile was displayed with a plastic body having a weight of 50 kg, i.e., 27% less than a metal body. The body of the truck ЗИЛ-150 (ZIL-150) is 20% lighter when produced from glass-reinforced plastics. Glass-reinforced plastics are a good material for bodies of sports cars, sidecars of motor scooters, engine casings of motorcycles, trailers, truck cabins, tank cars, and others. The advantages in the use of glass-reinforced plastics for the production of bodies are indicated which are mainly based on a reduction of metal consumption, weight, and cost, on the properties of glass-reinforced plastics, and on the quicker exchangeability and repair of cars. Most common are glass-reinforced plastics on the basis of cold-setting polyester resins. The technology of

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Application of Glass-reinforced Plastics in the Construction of Automobile Bodies

S/191/60/000/012/012/016
B020/B066

manufacture of large parts made of them was described, for instance, by P. Z. Li. et al., A. A. Peshekhonov, and B. A. Peshekhonov in the periodical "Plasticheskiye massy", No.2, 1959. Since 1957, the konstruktorskiy otdel (Design Department) and the laboratory of the eksperimental'nyy tsekh (Experimental Workshop) of the LAZ (= Leningradskiy avtomobil'nyy zavod = Leningrad Automobile Works) in co-operation with the nauchno-issledovatel'skiy institut plastmass (Scientific Research Institute of Plastics) in Moscow has been doing research work regarding the use of glass-reinforced plastics. At the LAZ, panels from glass-reinforced plastics on the basis of polyester resins (formed under atmospheric pressure and cold-set), resins БФ-2 (BF-2), ТГМ-3 (TGM-3), МГФ-9 (MGF-9), and ТГМФ-11 (TGMF-11) (vacuum-formed and hot-set), the ЭД-5 (ED-5) epoxy resin, and others, were produced and tested. Fig.1 shows a general view of the ЛАЗ-695 (LAZ-695) motorbus with plastic body, Fig.2 the fastening of the bonnet made of glass-reinforced plastics on the bus body, Fig.3 the inner panel of the upper air seal made of glass-reinforced plastics, and Fig.4 a seat of glass-reinforced plastics. Output and advantages, as well as prospects of the manufacture of such vehicles are dealt with. There are 4 figures.

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KLYAKOTKO, M. I TSEPOVA

16770 Tsepova, Ye. i Klyakotko, M. V W Cassiopeiae, Peremen. Zvezdy, T. VI, No. 6 1949, S. 320-21 G. Mekhanika. Gidromekhanika. Aeromekhanika

SO: LETOPIS' ZHUENAL STATEY, Vol. 27, Moskva 1949

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

KLYAKOTO, M. A.

Stars, Variable

BL Andromedae. Per.avezdy 8 no. 1 (1951)

9. Monthly List of Russian Accessions, Library of Congress, August 1952, Uncl.

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

KLYAKOTKO, M.A.

[redacted] photovisual magnitudes as color indexes of stars in the region of cluster. Soob. GAISH no.99:44-48 '56.
(Stars--Color)
(MLRA 10:3)

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

KLYAKOTKO, N.A.

Structure of the atmosphere of Jupiter. Biul.VAGO no.13:21-24 '53. (MLRA 7:3)

1. Moskovskoye otdeleniye VAGO otdel planet i Luny.
(Jupiter (Planet))

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

STEPANOV, V.Ye.; KLYAKOTKO, M.A.

Large-scale motions in subphotospheric layers of the sun. Izv.Krym.astrofiz.obser. 16:80-99 '56. (MIRA 13:4)
(Sun)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

KLYAKOTKO, M.A.

Jupiter in 1938. Biul.VAGO no.18:17-30 '56. (MLRA 10:1)

1. Moskovskoye otdeleniye Vsesoyuznogo astronomo-geodezicheskogo obshchestva, otdel planet i luny.
(Jupiter (Planet))

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3(1) PHASE I BOOK EXPLOITATION SOV/1840

Vsesoyuznoye astronomo-geodezicheskoye obshchestvo

Astronomicheskiy kalendar; yezhegodnik. Peremennaya chast'; 1959 (Astronomical Calendar; Yearbook. Variable Part; 1959) Moscow, Fizmatgiz, 1958. 370 p. 8,500 copies printed.

Ed.: I.Yu. Rakhlin; Tech. Ed.: S.N. Akhlamov; Editorial Board: P.I. Bakulin (Resp. ed.), S.G. Kulagin, A.G. Masevich, and P.P. Parenago.

PURPOSE: This astronomical calendar is intended for specialists in astronomy, astrophysics, and geophysics.

COVERAGE: The book is divided into two parts. The first, based on data taken from the USSR Astronomical Yearbook for 1959, consists of ephemerides and accompanying text, compiled and written by the following specialists: S.G. Kulagin and L.D. Kovbasyuk of the GAGO (State Astronomical and Geodetical Society) - notes on ephemerides, the ephemerides of the Sun and Moon; M.M. Degayev of the MOVAGO (Moscow Branch of the All-Union Astronomical and Geodetic Society) - text and maps of the visible trajectories of the planets, text and maps of eclipses, the physical coordinates

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of the Sun, Moon, Mars, and Jupiter, the satellites of Jupiter and Saturn; N.D. Rozenblyum (MOVAGO) - ephemerides and heliocentric longitudes of planets; I.P. Yegorchenko, A.A. Kaverin, T.G. Konstantinova, V.A. Kuklina, G.V. Kuklin, I.G. Sazonova, L.I. Chernykh, and N.S. Chernykh - data on 144 points in the USSR for the full solar eclipse of October 2, 1959; Yu.G. Bonidovich (GAGO) - occultation of the stars and planets by the Moon, observation of the Polar Star, computation of stellar coordinates; V.A. Bronshteyn (MOVAGO) - comets; N.S. Yakhontova - the lesser planets; and, N.B. Perova (MOVAGO) - variable stars. The second part, the Supplement, contains a review of the achievements in astronomy for the years 1956 and 1957, written by V.A. Bronshteyn, G.D. Dukuchayeva, L.A. Katasev, N.A. Klyakotko, P.P. Parenago, and I.S. Shcherbina-Samoylova under the editorship of A.G. Masevich, articles on artificial satellites, the danger in astronautics from meteors, the nature of galaxies, articles on scientific meetings held in the Soviet Union and abroad, and articles on the anniversaries of events in astronomy. The book is profusely illustrated with tables, maps, photographs, and diagrams. The Supplement includes some 125 Soviet references grouped according to subject matter and type of publication.

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Astronomical Calendar; Yearbook. Variable Part; 1959 SOV/1840

Joint Visiting Session of the Astronomical Council of the AS SSSR and the Academy of Sciences of the Azerbaydzhan SSR (M.A. Klyakotko) 271

This article treats the meeting at which M.M. Aliyev, A.A. Mikhaylov, A.A. Takovkin, S.K. Vsekhsvyatskiy, V.V. Sharonov, V.P. Shchdglov, I.I. Khalilov, V.A. Krat, and G.P. Bulianov participated.

The 350th Anniversary of the Formulation of Keppler's First Two Laws (Yu.A. Ryabov) 275

This article is a historical account and discussion of Keppler's first two laws.

The 85th Anniversary of the Tashkent Astronomical Observatory (V.P. Shoglov) 286

The article provides a detailed historical account and description of the Tashkent Astronomical Observatory of the Academy of Sciences of the Uzbec SSR, the oldest scientific research institution in Central Asia. The Observatory

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3(1)

AUTHOR: Klyakotko, M.A.

SOV/33-35-5-7/20

TITLE: The Structure of the Velocity Field of Motions in Latitude of Non-Recurring Sunspots (O strukturnosti polya skorostey dvizheniy nevozvrashchayushchikhsya solnechnykh pyaten po shirote)

PERIODICAL: Astronomicheskiy zhurnal, 1958, Vol 35, Nr 5, pp 739-747 (USSR)

ABSTRACT: The author joins the paper of V.Ye.Stepanov and M.A.Klyakotko [Ref 1] and shows the existence of a structure in the velocity field of motions in latitude of non-recurring sunspots. According to catalogues of the Greenwich Observatory the author gives a table containing the distribution in latitude of the mean velocities of motion in latitude of non-recurring sunspots for 1877-1887. The extrema of the curves of velocity distribution in latitude are identified and their correlation for different years are computed.

There are 3 tables, 15 figures, and 1 Soviet reference.

ASSOCIATION: Gosudarstvennyy astronomicheskiy institut imeni P.K.Shternberga (State Astronomical Institute imeni P.K.Shternberg)

SUBMITTED: April 20, 1957

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KLYAKOTKO, M.A.

Observation of the outburst of January 31, 1958, on the spectroheliscope at the State Institute of Astronomy on Lenin Mountains. Astron. tsir. no.189:6-7 F '58. (MIRA 11:8)

1.Gosudarstvennyy astronomicheskiy institut im. P.K. Shternberga, Moskva.

(Sun)

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

KLYAKOTKO, M.A.

Observations of solar flares with the spectroheliscope of the State Astronomical Institute on Lenin Mountains. Astron. tsir. no.190:16-19 Mr '58. (MIRA 11:9)

1. Gosudarstvennyy astronomicheskiy institut im. P.K.Shternberga, Moskva.

(Sun)

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

3(1)

AUTHOR: Klyakotko, M.A. SOV/33-36-3-25/29

TITLE: On the Probability of the Correlation Coefficients of the Fields of Velocities of Nonrecurrent Sunspots in Latitude for Different Years

PERIODICAL: Astronomicheskiy zhurnal, 1959, Vol 36, Nr 3, pp 550-551 (USSR)

ABSTRACT: The author estimates the probability that the correlation coefficients of the fields of velocity of nonrecurrent sunspots are random variables. Instead of the correlation coefficient K the author took the term magnitude $Z = \frac{1}{2}\left\{\ln(1+K) - \ln(1-K)\right\}$ according to Fischer. The calculation was made with tables of Mitropol'skiy [Ref 2]. The obtained values of the probability are very small, i.e. the correlation coefficients are authentic magnitudes. Herewith the opinion of the author given in [Ref 1] is confirmed.
There is 1 table, and 2 Soviet references.

ASSOCIATION: Gosudarstvennyy astronomicheskiy institut imeni P.K.Shternberga (State Astronomical Institute imeni P.K.Shternberg)

SUBMITTED: May 30, 1958

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

KLYAKOTKO, M.A.

Observation of a prominence wit' a height of 0.7 R. on the spectroheliosoope at the State Institute of Astronomy. Astron. tsir. no.199:13 Ja '59. (MIRA 13:2)

1.Gosudarstvennyy astronomicheskiy institut im. P.K. Shternberga, Moskva.

(Sun--Prominences)

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

KLYAKOTKO, M.A.

Observation of an eruptive prominence 0.85 of the solar radius high. Astron.tsir. no.203:2-3 Je '59. (MIRA 13:4)

1. Gosudarstvennyy astronomicheskiy institut im. P.K.Shternberga, Moskva.

(Sun--Prominences)

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

KLYAKOTKO, M.A.

Variable stars. Nauka i zhizn' 28 no.10:88-89 O '61.
(MIRA 15:1)

1. Nauchnyy sotrudnik Gosudarstvennogo astronomicheskogo instituta imeni P.K.Shternberga.

(Stars, Variable)

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

KLYAKOTKO, M.A.

High-intensity solar flare of July 18, 1961. Astron.tsir. no.224:2 Ag '61. (MIRA 16:1)

1. Gosudarstvennyy astronomicheskiy institut im. Shternberga.
(Solar flares)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

KLYAKOTKO, M.A.

Some peculiarities of meridian circulation on the sun. Astron. tsir. no.224:7-10 Ag '61. (MIRA 16:1)

1. Gosudarstvennyy astronomicheskiy institut im. Shternberga.
(Sunspots)

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

KLYAKOTKO, M.A.

Evaluating the dispersion and influence of boundary zones and comparing the methods for establishing weighting factors for observations in plotting velocity fields of the motion of non-recurring sunspots by latitudes. Soob.GAISH no.120:25-41 '62. (MIRA 15:9)

(Sunspots)

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

KLYAKOTKO, M.A.; KOZHEVNIKOV, N.I.

Character of large-scale motions in the solar photosphere.
Astron.zhur. 39 no.6:981-986 N-D '62. (MIRA 15:11)

1. Gosudarstvennyy astronomicheskiy institut im. P.K. Shternberga.

(Sun)

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S/033/63/040/001/008/016
E032/E514

AUTHORS: Kozhevnikov, N.I. and Klyakotko, M. A.

TITLE: Determination of some parameters of large-scale motions in the solar photosphere

PERIODICAL: Astronomicheskiy zhurnal, v.40, no.1, 1963, 61-70

TEXT: In a previous paper the authors put forward a method of studying the longitudinal motion of nonrecurring sunspots. In the present paper a more detailed analysis of the method is given and the results of its application reported in the previous paper are analysed. It is shown that the average modulus of the difference in the velocity of two sunspots separated by a latitude interval $\Delta\varphi$ can be approximately represented by a function of the form

$$f(\varphi) = \alpha \sin \frac{2\pi\varphi}{T} + \tau(\varphi), \qquad (3)$$

where $\tau(\varphi)$ is an aperiodic function. All the graphs of $|\overline{\Delta v}|_n$ given in the previous paper can be approximately fitted with this function. An adequate representation is obtained by putting $\tau(\varphi) = K\varphi$. It turns out that the parameter T reaches a minimum

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at times corresponding to minimum solar activity and then increases again. This is deduced from analyses of data for 1882-1896. It is still not clear whether the variation of T has a period equal to the eleven-year cycle or the twenty-two-year cycle. Analysis of the data for 1897 and the following years should yield an answer to this question. The parameter K is found to increase and decrease in synchronism with the degree of solar activity, although this must be confirmed by further analyses. The amplitude α increases as the minimum of solar activity is approached and then decreases towards the solar activity maximum. All the results are in agreement with the assumption that the meridional component of the motion of photospheric matter is mainly governed by the latitude φ of the point under consideration and, to a much lesser extent, by the longitude. It is, therefore, very probable that the motion of photospheric matter may be divided into zones inscribed on the sun in the longitudinal direction. The parameters of the motion will then vary from zone to zone and the width of any given zone will be related to the period T. On this assumption, the width is found to vary during

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a solar activity cycle between 5 and 8°, decreasing towards activity minimum. It appears that the width of all the zones is roughly the same, although this must also be verified in more detail. Finally, the effect of the inclination of these zones to the equator is considered and it is shown that this inclination is not likely to vary since if it did the effects would be in contradiction with observational data. The results of the above analysis cannot, therefore, be explained by this type of effect. There are 10 figures.

ASSOCIATION: Gos. astronomicheskiy in-t im. P. K. Shternberga (State Astronomical Institute imeni P. K. Shternberg)

SUBMITTED: November 16, 1961

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KLYAKOTKO, M.A.

Period of variations in the characteristic dimensions of the circulation of the sun. Astron.zhur. 40 no.4:776-778 Jl-Ag '63. (MIRA 16:8)

1. Gosudarstvennyy astronomicheskiy institut im. P.K.Shternberga. (Sun)

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

KLYAKOTKO, M.A.

Identifying the extremes of motion velocity fields by the latitude of nonrecurrent sunspot groups. Soob. GAISH no.131: 16-23 '64.
(MIRA 17:8)

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

KLYAMER, R.

Tractors - Motors

Increasing the work capacity of actuating motors of tractors. MTS 13, No. 1, 1953.

Monthly List of Russian Accessions, Library of Congress June 1953. UNCL.

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723220012-2

KLYAMER, R.

Young efficiency promoters. Prof.-tekh. obr. 20 no.3:10 Mr '63. (MIRA 16:3)

1. Starshiy master professional'no-tekhnicheskogo uchilishcha No.2, g. Leninabad.

(Vocational education) (Technological innovations)

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L 03765-67 EWP(t)/ETI IJP(c) JD

ACC NR: AP6029486 SOURCE CODE: PO/0095/66/014/005/0491/0496

AUTHOR: Klamka, J.; Klyamka, Ye.; Groszkowski, J.

ORG: Department of Electronics, Institute of Fundamental Technical Problems, Polish Academy of Sciences (Zaklad Elektroniki, Instytut Podstawowych Problemow Techniki, PAN)

32
B

TITLE: Series resistance of diffused silicon varactors

21

SOURCE: Polska akademia nauk. Bulletin. Serie des sciences techniques, v. 14, no. 5, 1966, 491-496

TOPIC TAGS: pn junction, varactor, silicon varactor, diffused silicon varactor, varactor resistance

ABSTRACT: A method of evaluating the series-resistance (R_s) in diffused silicon varactors is presented in which the p-n junction is obtained by diffusion of impurities. Practical formulas are derived which describe the series-resistance of the p-n junction with great thickness of the base. In addition, the calculated series-resistance values are compared with microwave measurements of the varactor series. It is stated that most of the series-resistance (R_s) is connected with

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the band of increased series resistance in the vicinity of the p-n junction. The presence of this band has a decisive effect on the changes in R_3 as a function of the polarization voltage. This paper was presented by J. Groszkowski on 12 February 1966. [Translation of abstract.]

[AM]

SUB CODE: 09/ DATE SUBM: none/ ORIG REF: 003/ OTH REF: 004

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