ARTEM'YEV, D.Ye., inzhener; MARCHENKO, Ye.A., inzhener; POLYAK, G.I., inzhener.

Equipment for linear capacitive compensation in 110 and 220 kv.networks. Elektrichestve no.8:33-40 Ag '56. (MLRA 9:10)

1.Nauchno-issledovatel'skiy institut postoyannego toka.
(Electric power distribution)

PHASE I BOOK EXPLOITATION 876

Marchenko, Ye.A., Rozovskiy, Yu.A., Shur, S.S., Candidates of Technical Sciences

Prodol'naya yemkostnaya kompensatsiya liniy elektroperedachi (Series Capacitor Compensation in Transmission Lines) Moscow, Gosenergoizdat, 1957. 47 p. (Series: Iz opyta sovetskoy energetiki) 11,300 copies printed.

Sponsoring Agency: Orgres, trust, Moscow. Byuro tekhnicheskoy informatsii.

Eds.: Korsuntsev, A.V., Candidate of Technical Sciences, and Demkov, Ye.D.; Tech. Ed.: Medvedev, L.Ya.

PURPOSE: The book is intended for designers and network technicians undergoing training for the operation of series capacitor compensation installations.

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Series Capacitor Compensation in Transmission Lines 876

COVERAGE: The authors describe the purpose and applications of series capacitor compensation and discuss special features of short-circuit conditions in compensated transmission lines. They describe the basic principles of erecting series capacitor batteries and also special behavioral properties of compensated networks. They supply connection diagrams of capacitors and discuss the problems involved in protecting series capacitors against internal damage; they also give examples of completed installations and their operational testing. In writing the book the authors drew on materials published by teploelektroproyekt concerning construction of the Kuybyshev electric power transmission line, the works of N.N.Shchedrin and A.V.Korsuntsev; M.L.Levinshteyn of LPI; M.A.Babikov and A.I.Dolginov of MEI; and V.V.Andreyev, V.M.Faynitskiy and A.K.Gertsik of NIIPT. There are 40 references, of which 27 are Soviet, 10 English, 1 French and 2 German.

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AVAILABLE: Library of Congress (QC587.07)

JP/whl
11-21-58

Card 4/4

MARCHENKO, Ye.A.

AUTHOR: Kazachov, A.I., Kurochkin, F.I., Engineers and Marchenko, Ye.A., Candidate of Technical Sciences. 104-2-14/38

TITLE: On the conditions of operation of shunting circuit breakers in series compensating installations. (Ob usloviyakh raboty shuntiruyushchikh vyklyuchateley v ustanovkakh prodolnoy kompensatsii)

PERIODICAL: "Elektricheskie Stantsii" (Power Stations), 1957, Vol. 28, No.2, pp. 56 - 60 (U.S.S.R.)

ABSTRACT: Series capacitors in transmission lines have dischargers to protect them from overvoltages when short circuits occur on the lines. The capacitors are provided with a shunting circuit breaker intended for operational switching and for disconnecting the installation for repair or examination. The operating conditions of these circuit breakers have certain special features. The class of insulation can be lower than that of the rest of the system if the breakers are installed on an insulated platform. The rupturing capacity is not very great as the greatest current to be disconnected is the line current in normal overload conditions with a low rate of rise of restriking voltage because of the large capacitance in parallel with the contacts. There are certain additional requirements in that the breakers must withstand the thermal

Card 1/3

On the conditions of operation of shunting circuit breakers in series compensating installations. (Cont.) 104-2-14/38

and dynamic effects of the discharge currents. However, tests carried out with circuit breakers types BBH-110 and BM-35 on a 220 kV installation show that no damage was done to current carrying parts by electro-dynamic forces after multiple passage of discharge currents the amplitude of which was much greater than the normal permissible maximum short circuit current. Tests that were carried out are described and the results are given in the form of oscillograms. It was found that the de-ion grids took no part in the process of arc suppression and may be removed whilst the contact system must be made in such a way that rigidly mounted parts are not in the way of the explosion wave. The contact system was accordingly reconstructed and the way in which this was done is illustrated. Because of removal of potential screens the discharge voltage between bushings and tank was reduced by 10 - 15 kV.

Apart from the danger of dynamic effects of the explosion wave on the contact system the quantity of energy dissipated in the breaker after a large number of repeated discharges of the condenser battery may greatly exceed the energy dissipated during the heaviest short circuit and so the content of

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On the conditions of operation of shunting circuit breakers in series compensating installations. (Cont.) 104-2-14/38

oil deterioration products is high; the oil had to be changed after shunting a few times a 220 kV condenser installation with a line current of 600 A equal to the rated current of the breaker. Contamination of the oil was insignificant at currents up to 450 A. This contamination can be reduced by increasing the speed of separation of the contacts and increasing the damping resistances in the breaker circuits. It would be advisable to develop circuit breakers of light construction specially intended for operation in series capacitor installations. Circuit breaker BM-35 cannot be used without reconstruction of its contact system.

There are 7 figures and 3 references.

AVAILABLE:

Card 3/3

MARCHENKO, E. A.

621.316.933 : 621.319.44

683. FEATURES OF APPLICATION OF ARRESTERS WITH FORCED DEIONIZATION FOR PROTECTING LINE-COMPENSATING EQUIPMENT. - E. A. Marchenko.
Elekt. Stanzii, 1957, No. 8, 41-5. In Russian.

It is desirable to avoid repeated discharges of a capacitor battery during short-circuit in the case of high values of spark-gap recovery strength. Air quenching of the arc is recommended provided that the "non-blast" interval of the arrester conforms to the short-circuit duration. Reference is made to the numerous characteristics for which allowance must be made when utilizing arresters of this type.

Central Electricity Generating Board Digest

MARCHENKO Ye. A.

KOSTENKO, M.P., akademik; ZAVALISHIN, D.A., prof.; SHCHEDRIN, N.N., doktor tekhn. nauk; SALITA, P.Z., inzh.; VAZHNOV, A.I., kand. tekhn. nauk, dots.; ROZOVSKIY, Yu.A., kand. tekhn. nauk; MARCHENKO, Ye.A., kand. tekhn. nauk.; POLYAK, G.I., inzh; VENIKOV, V.A., doktor tekhn. nauk, prof.

Dynamic models of power systems. Elektrichestvo no.2:78-85 F '58. (MIRA 11:2)

1. Nauchno-issledovatel'skiy institut postoyannogo toka (for Schedrin, Salita, Vazhnov, Rozovskiy, Marchenko, Polyak). 2. Chlen-korrespondent AN Uzbekskoy SSR (for Shchedrin). 3. Moskovskiy energeticheskiy institut (for Venikov).

(Electric networks)

2

L 2572-66 EWT(m)/EPF(c)/EWP(j) DJ/GS/RM

ACCESSION NR: AT5022679 UR/0000/65/000/000/0285/0289

AUTHORS: Akishin, A. I.; Troyanovskaya, G. I.; Isayev, L. N.; Sergeyeva, L. M.; Andreyeva, M. G.; Marchenko, Ye. A.; Alekseyev, N. M.

TITLE: Behavior of friction junctions and some self-lubricating materials in a vacuum under ion bombardment

SOURCE: AN SSSR. Nauchnyy sovet po treniyu i smazkam. Teoriya treniya i iznosa (Theory of friction and wear). Moscow, Izd-vo Nauka, 1965, 285-289

TOPIC TAGS: friction, wear, solid lubricant, molybdenum disulfide, polymer, ion radiation effect/ AMAN self lubricating material, AF ZA plastic lubricant

ABSTRACT: The effects of hydrogen ion bombardment on the coefficient of friction and on wear of friction junctions were investigated. Self-lubricating materials containing graphite, MoS_2, WS_2, $MoSe_2$, and various polymeric bonding matrices, and, in particular, material AMAN, bronze-based metalloceramic coated with MoS_2 and plastic AF-ZA were tested in the apparatus shown on Fig. 1 on the Enclosure. The specimens were irradiated with 3-Kev hydrogen ions, and their friction and wear characteristics against a steel shoe (1 kg load, 1.2 m/sec) were measured over a

Card 1/3

ACCESSION NR: AT5022679

9.5-hour period (1 hour run-in, 2 hours in vacuum, 6 hours in vacuum under radiation and 30 minutes without radiation, or 1 hour run-in and 8.5 hours in vacuum without radiation). It was found that the coefficient of friction decreased significantly in vacuum, but that radiation had no measurable effects on friction or wear of any materials tested. Thus the coefficient of friction can be calculated from

$$f=0{,}35C_s\left(\frac{p_0}{H_c\beta}\right)^{\frac{1}{\gamma}}+0{,}08\beta+\frac{\tau_0}{HB},$$

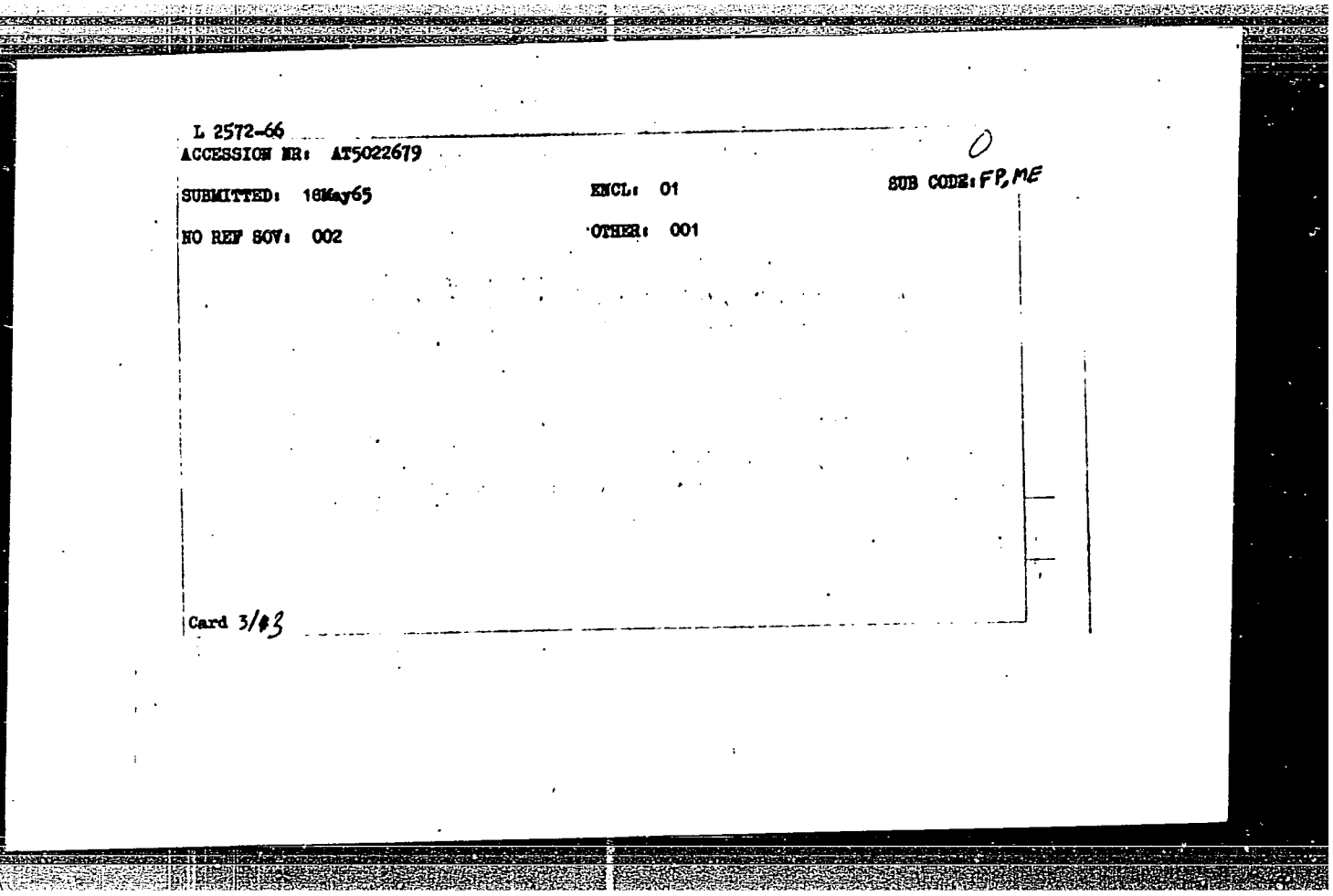
(where β = adhesion coefficient, C_5 and γ = microstructure characteristics, τ_0 = specific shear adhesion, p_0 = contour pressure) which is suggested by Kragel'skiy and Mikhin. The wear can be calculated from

$$I=k\frac{A\left\{-\ln\left[1-\frac{h_{max}}{R}\left(\frac{p}{bHB}\right)^{\frac{1}{\gamma}}-\sqrt{2\frac{h_{max}}{R}\left(\frac{p}{bHB}\right)^{\frac{1}{\gamma}}\frac{1-\frac{2\varepsilon}{\sigma_s}}{1+\frac{2\varepsilon}{\sigma_s}}}\right]\right\}^{\delta}}{\gamma(\nu+1)[\ln(1+\theta)]^{\delta}}\frac{p}{HB},$$

(where θ = angle of irregularities on friction surface, δ = elongation in tension, σ_s = yield point). Orig. art. has: 2 formulas, 3 tables, and 2 figures.

ASSOCIATION: Nauchnyy sovet po treniyu i smazkam, AN SSSR (Scientific Committee on Friction and Lubrication, AN SSSR)

Card 2/3



L 2572-66
ACCESSION NR: AT5022679

SUBMITTED: 18May65 ENCL: 01 SUB CODE: FP, ME

NO REF SOV: 002 OTHER: 001

Card 3/3

40672

S/138/62/000/008/007/007
A051/A126

5 9300

AUTHORS: Levitin, I. A., Poloskin, Ye. N., Petrova, V. D., Marchenko, Ye. D.

TITLE: Apparatus for testing ozone resistance of rubber

PERIODICAL: Kauchuk i rezina, no. 8, 1962, 51 - 53

TEXT: The Moscow Tire Plant has developed and perfected a new apparatus for dynamic testing of the ozone resistance of rubber, based on experiments by the NIIShP and the principle used at the NIIRP. The apparatus determines the ozone resistance under dynamic conditions by periodic expansion of standard rubber samples in a chamber where a given ozone concentration is maintained. The schematic diagram is shown in Figure 2. The test conditions for tread rubber are given by the following figures: constant expansion 15%, variable expansion 25%, expansion frequency 15/min, rate of air supply into the chamber 2ℓ/min, ozone concentration in the chamber $(1\pm0.2)\cdot10^{-4}$ w.p. The disadvantages of the apparatus are: lack of automatic control of ozone concentration and the impossibility of creating temperature conditions within the testing chamber. There are 2 figures.

ASSOCIATION: Moskovskiy Shinnyy Zavod (The Moscow Tire Plant)

Card 1/1

L 13661-63 EWP(j)/EWT(m)/BDS AFFTC/ASD Pc-4 RM

ACCESSION NR: AP3001427 S/0138/63/000/004/0014/0017

AUTHOR: Levitin, I. A.; Polozkin, Ye. N.; Petrova, V. D.; Marchenko, Ye. D.

TITLE: An investigation of physical antiozonants of various origin

SOURCE: Kauchuk i rezina, no. 4, 1963, 14-17

TOPIC TAGS: ozone, antiozonant, paraffin, ceresine, wax, rubber

ABSTRACT: The antiozonants under study were domestic paraffins, natural and synthetic ceresines, as well as imported microcrystalline waxes, which were presumably mixtures of paraffins and isoparaffins. Their density, viscosity, softening point, and microscopic picture were studied. The paraffins are characterized by large crystals and a low basic viscosity at 35C of 9-16 Eta, the ceresines having a microcrystalline structure and a basic viscosity of 19-38 Eta, while the imported waxes showed basic viscosities of 16-44 Eta. Superior brands of 100% NK and BCK protector-type rubber, containing 2% of the above physical antiozonants, were placed in a chamber containing 1/10000% by weight of ozone. Under static conditions, the imported waxes, a ceresine brand, as well as some domestic paraffins were able to protect the surface cracking of rubber for a 100-minute period, while the protective effect of the remaining paraffins and ceresines did not last over 17-20 minutes. Under dynamic conditions, on the other hand, two ceresines, with melting points of

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L 13661-63

ACCESSION NR: AP3001427

90.8 and 72.6C, showed some protective effect. The balance of the antiozonants under study exhibited no beneficial effect whatsoever. It is suggested that while under static conditions a paraffin or ceresine may provide protection against the destructive effect of ozone by film formation on the surface of the rubber, the said film would crack under the impact of dynamic stresses. The present work was conducted at the All-Union Scientific Research Institute of the Oil Industry. Orig. art. has: 2 charts and 1 table.

ASSOCIATION: Moskovskiy shinnyy zavod (Moscow Tire Factory)

SUBMITTED: 00 DATE ACQ: 30May63 ENCL: 00

SUB CODE: 00 NO REF SOV: 002 OTHER: 002

Card 2/2

L 11779-66 EWT(m)/EWP(j)/T RM

ACC NR: AP6001094 SOURCE CODE: UR/0138/65/000/012/0024/0025

AUTHOR: Levitin, I. A.; Petrova, V. D.; Marchenko, Ye. D.; Ioffe, A. I.

ORG: Moscow Tire Plant (Moskovskiy shinnyy zavod)

TITLE: Development and use of a waxlike antiozonant in automobile tire treads

SOURCE: Kauchuk i rezina, no. 12, 1965, 24-25

TOPIC TAGS: rubber chemical, antioxidant additive, resin, synthetic rubber, vehicle component

ABSTRACT: The Moscow Tire Plant (Moskovskiy shinnyy zavod) and Moscow Petroleum and Oil Refinery (Moskovskiy neftemaslozavod) developed a waxlike antiozonant composed of natural and synthetic ceresin, paraffin, and petrolatum, the content of ceresins being predominant. A thorough study of the new antiozonant, AF-1, was carried out in tread rubbers composed of 100% SKMS-30ARKM. The protective properties of AF-1 were found to compare very favorably with those of Antilux, an imported antiozonant. AF-1 has now replaced Antilux at the Moscow Tire Plant, and its use in the tire and rubber industry for protection of rubber treads against ozone cracking is highly recommended. Orig. art. has: 2 figures and 3 tables.

SUB CODE: 11, 13 / SUBM DATE: none / ORIG REF: 003

Card 1/1 UDC: 678.048.004.12.004.14

(A) L 8499-66 EWT(m)/EWP(j) RM

ACC NR: AP5028479 SOURCE CODE: UR/0286/65/000/020/0064/0064

AUTHORS: Levitin, I. A.; Gromova, L. G.; Petrova, V. D.; Ioffe, A. I.; Marchenko, Ye. D.

ORG: none

TITLE: A method for obtaining rubbers. Class 39, No. 175644

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 20, 1965, 64

TOPIC TAGS: rubber, ozone, antiozonant, cerisin, paraffin, petrolatum/ AF antiozonant mixture

ABSTRACT: This Author Certificate presents a method for obtaining rubber by applying a waxlike antiozonant. To increase the resistance of rubber to ozone, mixture AF, consisting of natural cerisin (30-70 wt parts), synthetic cerisin (20-5 wt parts), paraffin (40-10 wt parts), and petrolatum (10-0 wt parts), is used as the waxlike antiozonant. Mixture AF may be applied together with chemical antiozonants.

SUB CODE: 07, 11/ SUBM DATE: 11Sep62

Card 1/1

UDC: 678.7.048
665.436.432

MARCHENKO, Ye. N.

Industrial sanitary supervision in RSFSR. Gig. sanit., Moskva no.4: 52-56 Apr 1953. (CIML 24:4)

MARchenko, E.V.

AUTHOR VOYTOVETSKIY V.K., LEVIN B.A., MARCHENKO E.V. PA - 2670

TITLE Soft 15-800 keV Radiation Accompanying U^{235} Fission Induced by Thermal Neutrons. (Myakhkoye γ-izlucheniye v oblasti energiy ot 15 do 800 keV, soprovozhdayushcheye deleniy U^{235} teplovymi neytronami.- Russian)

PERIODICAL Zhurnal Eksperim. i Teoret, Fiziki 1957, Vol 32, Nr 2, pp 263 - 267 (USSR).

Received: 5/1957 Reviewed: 6/1957

ABSTRACT Experimental order: In a current of thermal neutrons an ionization chamber with U^{235} was fitted which registered fission fragments. For the purpose of analyzing the amplitudes, the amplitudes of a scintillation counter which coincide with the fission fragments resulting from fission fragments are selected by means of a coincidence scheme and a "geal". The experimental order is discussed by on the basis of a graph. Measuring Results are well reproducible on the occasion of repeated measurements. $\sim 5,10^3$ acts of fissioning per sec were registered. A diagram illustrates the amplitude distribution of the momenta of these γ-rays which as regards time are correlated with the fragments within the energy interval 15 - 400 keV. Statistical accuracy of measurements amounts to 0,5 - 1,5 %. The photopeaks correspond to the energies 27, 60, 101, 119, 142, 207, 295 and 360 keV. Measurements carried

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PA - 2670

Soft 15-800 keV Radiation Accompanying U^{235} Fission Induced by Thermal Neutrons.

cut with a lead layer of 5 mm thickness between chamber and crystal permit the evaluation of the influence exercised by non-elastic scattering. In the spectrum obtained by means of the layer of lead the lines 27, 101, 119, 142, 295 keV are lacking and the line 360 keV is considerably weakened. The line 60 keV was fully conserved and a weak radiation of 207 still exists. The lines 27, 101, 119, 142, 207, 295 and 360 keV are presumely caused by the γ-radiation occurring on the occasion of fissen but the line 60 keV and a negligibly small part of the radiation with 207 keV are caused by the nonelastic scattering of fission neutrons by the iodine contained in the crystal.
For some lines of the radiation occurring on the occasion of fission the values of energy and intensity are given in a graph. Apparently, the soft radiation is emitted by excited fragments after emission of the neutrons.
(6 illustrations and 1 table)

ASSOCIATION Institute of Atomic Energy of the Academy of Science of the USSR.
PRESENTED By: -
SUBMITTED: 24. 9. 1956.
AVAILABLE: Library of Congress.

CARD 2/2

89365

S/089/61/010/002/017/018
B102/B209

26.2242

AUTHORS: Levin, B. A., Marchenko, Ye. V., Timoshuk, D. V.

TITLE: The effect of inelastic neutron scattering in uranium on the slowing-down length in water

PERIODICAL: Atomnaya energiya, v. 10, no. 2, 1961, 177-179

TEXT: The present "Letter to the Editor" is a report on direct measurements of the effect of inelastic neutron scattering in uranium upon the slowing-down length in pure water. The measurements were carried out in spherically symmetrical geometry in order to exclude elastic scattering to a high degree. A 16-mm-diameter source shammed the fission neutron spectrum and was enveloped by 2-cm thick spherical shells of metallic uranium enriched in U^{235}. The mean square distance at which the neutrons emitted from the (point) source were slowed down to a certain energy, e. g. 1.46 ev, is given by $\overline{r^2_{In}} = \int_0^\infty A(r)r^4dr / \int_0^\infty A(r)r^2dr$ (1), where A(r) denotes the activity of the

Card 1/5

The effect of inelastic ...

indicator (indium foil in cadmium envelope) in dependence on the distance r from the source. In order to eliminate the effect of the size of the hollow sphere (in which the source was located) the $\overline{r^2}$ measurements were made for various (with different radius a) uranium layers of equal thickness after which $\overline{r^2}$ (a) was extrapolated to a = 0. The $\overline{r^2}$ value obtained corresponded to a point source. The measurements were made in a tank (100 cm in diameter, 110 cm high) filled with water into which the spheres were immersed suspended by two 0.5-mm thick steel strings. The indium foils (70 mg/cm^2 thick, diameter of the effective areas 1.7 and 2.5 cm) were closed up in casings. The targets were exposed in two, at a distance of 8 cm. The activity of the foils was measured simultaneously from both sides by means of two lead-shielded scintillation counters (ϕЭУ-29(FEU-29)-type photomultipliers with stilbene crystals, diameter 32 mm, 1 mm thick). The sensitivity of the experimental arrangement was controlled by an Sr^{90} preparation (it amounted to $\pm$0.5%). The measurements were repeated 2 6 times for all distances. Measurements at distances from the uranium sphere of up to 15 cm were made with small targets, at 10 - 21 cm with large targets in

cadmium casings, and at 15 - 31 cm with large targets in aluminum casings. In the measurements within these overlapping ranges and in measurements with thin-walled hollow spheres, reproducible $\overline{r^2}$ values were obtained with an accuracy of 1.2%. The r^2 values calculated according to (1) are listed in a table. In the case of distances of over r-a = 15 cm, integration was performed analytically. In agreement with the results of the measurements it was found that the decrease of $A(r)r^2$ becomes exponential from r-a = 15 cm onwards, with a relaxation length of 7.11±0.08 cm for the hollow spheres and 6.52±0.06 cm for uranium. The relaxation lengths were calculated according to the method of the least squares. As is shown also graphically, $\sqrt{\overline{r^2}}$ is a nearly linear function of the radius a of the sphere (2): $\sqrt{\overline{r^2}} = \sqrt{\overline{r_o^2}} + ka$. $\overline{r_o^2} = 187.1 \pm 1.1$ cm^2 (value of extrapolation to a = 0) is obtained With consideration of the correction for the capture of resonance neutrons (0.5%), extrapolation yields the value $\overline{r_o^2} = 161.5 \pm 4.0$ cm^2 for the uranium layers. Measurements with lead showed that the results are not affected by elastic neutron scattering. In the measurements in uranium, 9% of fission

neutrons arose which reduced the $\overline{r^2}$ value by about 1%. With consideration of all corrections it may be said that inelastic neutron scattering in 2.0-cm thick metallic uranium reduces $\overline{r^2}$ by (12.7±2.2)%. $r^2_{inel} = 64$ cm^2 is obtained for the second spatial moment. The mean energy of the neutrons inelastically scattered in uranium was calculated as ~0.5 Mev. For U^{235}, $\tau = 28 \pm 1.5$ cm^2 ($\tau = \overline{r^2}/6$, the neutron age) is obtained which is in fair agreement with the theoretical value (26±0.5 cm^2). The results of the investigation show that in uranium-water systems with sufficiently big uranium lumps the reduction of the slowing-down length of fission neutrons as a consequence of inelastic scattering in uranium is quite considerable and has to be taken into account in reactor calculations and design. The authors thank G. A. Bat' for his discussions of theoretical problems and L. Ye. Morozova, G. S. Stolyarova, and L. A. Serdyukova for their assistance. There are 1 figure, 1 table and 5 references: 5 Soviet-bloc.

SUBMITTED: July 7, 1960

The effect of inelastic ...

Legend to Table: 1) Density; 2) with uranium; 3) with lead; K^* is the coefficient denoted by k in (2).

	1 Полость					2 С ураном			3 Со свинцом	
a, см	0,8	3,3	5,0	7,0	11,15	3,59	5,80	6,80	3,58	6,81
$\bar{r}^2(a)$, см^2	200,3±±2,6	244,8±±1,9	272,6±±5,3	311,2±±4,4	416,2±±7,9	206,3±±1,8	234,1±±1,8	255,1±±2,1	242,6±±3,2	305,2±±3,8
K^*	0,588±0,006					0,480±0,027			0,582±0,039	
$\bar{r}_0^2$, см^2	187,1±1,1					161,5±4,0			182,8±5,7	

Card 5/5

MARCHENKO, Ye.Ya.

Zonality in the skarns found near the Tibek River (Khakassia). Dokl.AN SSSR 104 no.4:619-621 O '55. (MLRA 9:2)

1.Khar'kovskiy gosudarstvennyy universitet imeni A.M.Gor'kogo. Predstavlena akademikom D.S.Korzhinskim.
(Khakass Autonomous Province--Rocks, Siliceous)

MARCHENKO, Ye.Ya. [Marchenko, IE.IA.]; LIKOV, O.I. [Lykov, O.I.]; ZARITSKIY, O.I. [Zaryts'kyi, O.I.]

Vein barite of the convergence zone of the Azov Crystalline Massif and Donets Ridge. Trudy Inst.min.resur. AN URSR no.2: 59-65 '60. (MIRA 15:5)
(Azov Sea region--Barite) (Donets Ridge--Barite)

LYKOV, A.I. [Lykov, O.I.]; MARCHENKO, Ye.Ya.

Skarns of the southwestern edge of the Donets Basin. Dop.AN URSR no.9:1286-1289 '60. (MIRA 13:10)

1. Institut mineral'nykh resursov AN USSR. Predstavleno akademikom AN USSR V.G.Bondarchukom.
(Donets Basin--Skarns)

MARCHENKO, Ye.Ya.

Stone mushrooms. Priroda 49 no.7:113-114 Jl '60.
(MIRA 13:7)

1. Institut mineral'nykh resursov Akademii nauk USSR, Simferopol'.
(Azov Sea region--Rocks)

MARCHENKO, Ye.Ya. [Marchenko, IE.IA.]

Accessory beryl from pegmatites. Mat.z min.Ukr. no.2:122-124 '61. (MIRA 15:8)

(Beryl) (Pegmatites)

MARCHENKO, Ye. Ya.

Scapolite from contact metasomatic formation in granites of the middle Azov Sea region. Dop.AN URSR no.5:665-668 '61.
(MIRA 14:6)

1. Institut mineral'nykh resursov AN USSR. Predstavleno akademikom AN USSR V.G. Bondarchukom [Bondarchuk, V.H.]
(Azov Sea region--Granites)
(Scapolite)

MARCHENKO, Ye.Ya.

Garnet containing magnesium from pegmatites of the Sea of Azov region. Dop. AN URSR no.12:1626-1629 '61. (MIRA 16:11)

1. Institut mineral'nykh ressursov AN UkrSSR. Predstavleno akademikom AN UkrSSR V.G. Bondarchukom [Bondarchuk, V.H.].

YURK, Yu. Yu.; MARCHENKO, Ye.Ya.; GONCHAROVA, Ye.I.

Britholite from crystalline rocks in the eastern part of the Sea of Azov region (Ukrainian S.S.R.). Dokl. AN SSSR 137 no.4:947-950 Ap '61. (MIRA 14:3)

1. Institut mineral'nykh resursov AN USSR. Predstavleno akademikom D. I. Shcherbakovym.
(Kal'chik Valley--Britholite)

ARKHIPOV, A. S.; BOYTSOV, A. N.; MARCHENKO, Ye. N. (Moskva)

Pollution with toxic substances in the atmosphere of chemical factories. Gig. truda i prof. zab. no.1:3-8 '62. (MIRA 15:2)

1. Institut gigiyeny truda i profzabolevaniy AMN SSSR.

(AIR--POLLUTION)

MARCHENKO, Ye. Ya.; GONCHAROVA, Ye. I.; Prinimali uchastiye: CHASHKA, A. I.; FOST, A. L.

Role of halogens in the formation and subsequent change of monazite of pneumatolytic-hydrothermal genesis. Dokl. AN SSSSR 155 no. 2:349-352 Mr '64. (MIRA 17:5)

1. Institut mineral'nykh resursov, Simferopol'. Predstavleno akademikom V. S. Sobolevym.

MARCHENKO, Ye.Ya.

Correlation role of inclusions in accessory granitoid zircon. Dokl. AN SSSR 160 no.2:432-434 Ja '65.

(MIRA 18:2)

1. Institut mineral'nykh resursov, Simferopol'. Submitted September 8, 1964.

MARCHENKO, Ye.Ya.

Accessory pneumatolytic-hydrothermal tourmaline from pegmatites in the eastern part of the region of the Sea of Azov. Dop. AN URSR no.9:1230-1233 '64. (MIRA 17:11)

1. Institut mineral'nykh resursov AN UkrSSR. Predstavleno akademikom AN UkrSSR V.G. Bondarchukom [Bondarchuk, V.H.].

GOROSHNIKOV, B.I.; DZHUN', V.S.; KUKOLEV, G.V.; MARCHENKO, Ye.Ya.; SKOMAROVSKAYA, L.A.; CHASHKA, A.I.; SHCHUKAREVA, L.A.; YURK, Yu.Yu., doktor geol.-miner. nauk, prof.; YU'KIEV, L.D.; SERDYUK, O.P., red.

[Granitoid rocks in the Azov Sea region and prospects for using them in the ceramic and glass industries] Granitoidnye porody Priazov'ia i perspektivy ikh ispol'zovaniia v keramicheskom i stekol'nom proizvodstvakh. Pod red. Iu.Iu. Iurka. Kiev, Naukova dumka, 1964. 142 p. (MIRA 17:9)

1. Akademiya nauk URSR. Kiev. Institut mineral'nykh resursiv.

Distr: 4E2c

Ceramic flux for welding low-carbon steel. R. P. Burlakova, A. G. Muzel', Yu. A. Marchenko, and N. A. Sushchenko. U.S.S.R. 109,819, Aug. 26, 1957. The flux contains Mn ore 54, fluorspar 7, quartz sand 30, 75% ferrosilicon 7, and powd. Al 2%, and to this is added Na silicate, 15-17% of the wt. of the other components. M. Hosch

MARKOV, K.M., doktor tekhn. nauk, prof.; [illegible], I.K., kand. tekhn. nauk; MARCHENKO, Yu.A., inzh.

Effect of the distance between adjacent nozzle arcs to energy losses due to partial supply of the working medium in turbine stages. Izv. vys. ucheb. zav.; energ. 9 no.1:54-58 Ja '66. (MIRA 19:1)

1. TSentral'nyy kotloturbinnyy institut imeni I.I. Polzunova. Submitted May 17, 1965.

Marchenko, Yu. I.

135-12-3/17

AUTHOR: Mazel', A.G., Candidate of Technical Sciences, Rogova, Ye. M., Engineer, and Marchenko, Yu.I., Engineer

TITLE: Evaluating the Metal Transfer in the Arc in Manual Welding by Means of Current and Arc Voltage Oscillograms (Ob otsenke perenosa metalla v duge pri ruchnoy svarke po ostsillogrammam toka i napryazheniya dugi)

PERIODICAL: Svarochnoye Proizvodstvo, 1957, # 12, p 9-12 (USSR)

ABSTRACT: The article gives the results of an experimental study of the metal transfer processes in bottom, vertical and ceiling position, with electrodes "УОНИ-13/45","УП-2/45","СМ-11","СММ-5" "ЦМ-7","ЦНИЛСС-342","ЦЦ-1"(experimental cellulose electrodes), "ВН-48"(CSR) and Fleetweld-5 (USA electrodes). A specially adapted "АДС-1000-1" automatic welder and an "МПО-2" oscillograph were used. Manual welding was also studied to find the influence of the welder's hand oscillations. The observations made are described in detail. The electrodes were supplied by LEMZ ("ЛЭМЗ"), VNIIStroyneft', plant "Krasnyy Kotel'shchik", a Leningrad plant, and TsNIITMASh. One group of the studied electrodes produced 5 uniform short circuits per second, the

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Evaluating the Metal Transfer in the Arc in Manual Welding by Means of Current and Arc Voltage Oscillograms

second group was characterized by 20-30 short circuits per second, the third group by 6-10 non-uniform short circuits per second. The kind of current and the electrode diameter had some influence, the arc length proved to be of great influence. The hand oscillations did not influence the metal transfer process. The observed influence of various welding process conditions are shown in charts and oscillograms.
There are 6 oscillograms and 2 charts.

ASSOCIATION: VNIIStroyneft'

AVAILABLE: Library of Congress

MAZEL', Aleksandr Grigor'yevich, kand. tekhn. nauk; ROGOVA, Yelena Mikhaylovna, inzh.; MARCHENKO, Yuriy Ivanovich, inzh.; RAGAZINA, M.F., inzh., ved. red.; SHTERLING, S.Z., dots., red.; PONOMAREVA, V.A., tekhn. red.

[Selection of elctrodes for the welding of low-carbon steels] Vybor elektrodov dlia svarki malouglerodistykh stalei. Moskva, Filial Vses. in-ta nauchn. i tekhn. informatsii, 1958. 18 p. (Peredovoi nauchno-tekhnicheskii i proizvodstvennyi opyt. Tema 12. No.M-58-62/6) (MIRA 16:2)
(Steel--Welding) (Electrodes)

FAL'KEVICH, A.S., kand.tekhn.nauk; MARCHENKO, Yu.I., inzh.

Automatic butt welding of nonrotatable pipes in field work conditions. Stroi. truboprov. 3 no.12:7-12 D '58. (MIRA 12:1)
(Pipelines--Welding)

SOV-135-58-11-8/21

AUTHORS: Fal'kevich, A.S. and Mazel', A.G., Candidates of Technical Sciences; Marchenko, Yu.I. and Mikhlin, I.I., Engineers

TITLE: Automatic Overhead Pipe Welding Under Flux (Avtomaticheskaya svarka pod flyusom trub v potolochnom polozhenii)

PERIODICAL: Svarochnoye proizvodstvo, 1958, Nr 11, pp 19-23 (USSR)

ABSTRACT: Information is presented on experimental data obtained by the welding laboratory at VNIIST in developing a new method of overhead welding (suggested by welding operator A.A. Morozov). It can be applied for the overhead welding of the first layer of carbon and low alloy steel pipes of 114 - 720 mm in diameter without support rings and with flux fed into the arc space by means of a worm. The main technological factors of the new method are the displacement of the electrode from the lowest point of the pipe and the force of pressure upon the flux pad. The method ensures a stable burning of the arc, and a satisfactory accumulation of the weld metal. Optimum welding parameters permit the obtaining of a 4 - 5 mm thick first layer with high mechanical properties. Special devices developed at VNIIST with the participation of engineers A.M. Karbachinskiy and N.I. Shlyuyev are used in the new method,

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Automatic Overhead Pipe Welding Under Flux SOV-135-58-11-8/21

which is recommended for industrial purposes.
There are 6 tables, 1 diagram, 1 oscillogram, and 5 photos.

ASSOCIATION: VNIIST

1. Pipes—Arc welding 2. Arc welding—Equipment
3. Electric arcs—Performance

Card 2/2

FAL'KEVICH, A.S., kand. tekhn. nauk; MARCHENKO, Yu.I., inzh.

Developing technology and equipment for welding nonrotatable large diameter pipe butts. Svar. proizv. no.2:8-12 F '59. (MIRA 12:1)

(Pipe, Steel--Welding)
(Electric welding--Equipment and supplies)

84607

S/135/60/000/004/004/008
A115/A029

1.2300 only 2208, 2708, 2308

AUTHORS: Fal'kevich, A.S., Candidate of Technical Sciences, Marchenko, Yu.I., Engineer, Sevbo, P.I., Candidate of Technical Sciences, Livinskiy, V.P., Engineer, Dubovetskiy, V.Ya., Engineer

TITLE: CO_2 Shielded Arc Welding of Gas Pipelines

PERIODICAL: Svarochnoye proizvodstvo, 1960, No. 4, pp. 22 - 25

TEXT: This article was worked out in collaboration with the Engineers of the Svarochno-montazhnyy trest (Welding Engineering Trust) F.A. Zasko, G.Ye. Kogan, V.A. Umets, G.K. Vykhristyuk, members of the VNIIST (All-Union Scientific Research Welding Institute) A.R. Yanbukhtin, V.M. Yampol'skiy, V.I. Fedorov and A.Z. Karbochinskiy; Chief Engineer of the Kiyevskiy remontno-mekhanicheskiy zavod (Kiev Mechanical Repair Plant) M.R. Unigovskiy and members of the Institut elektrosvarki im. Ye.O. Patona (Institute of Electric Welding imeni Ye.O. Paton) D.A. Dudko and F.M. Vinogradskiy. After a brief review of welding methods used in construction of pipe lines in the USSR, some new methods developed since 1959 are described. In July 1959 tests with CO_2-shielded welding without grommets were performed on the Shebelinka-Belgorod gas pipe line by the Welding Engineering Plant (SU-4), All-

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S/135/60/000/004/004/008
A115/A029

CO_2 Shielded Arc Welding of Gas Pipelines

-Union Scientific Research Welding Institute, Institute of Electric Welding imeni Ye.O. Paton and Kiev Mechanical Repair Plant of the Glavgaz of the USSR (KRMZ) for the tests performed on 12 m long, 720 mm in diameter and 8 - 10 mm thick 19G steel pipes made in Chelyabinsk the following equipment was used: centering collars produced by the KRMZ (Fig. 1), centering collars produced by the Institute of Electric Welding (Fig. 2) weighing 25 kg each, ПЭГП-53 (PEGP-53) welding set (Fig. 3) equipped with a ЯАЗ-240Г (YaAZ-240G) diesel engine, 3 generators and 6 CO_2 containers; A-607 semiautomatic welding apparatus (Figs. 4 and 5) produced by the Institute of Electric Welding imeni Ye.O. Paton, АС -59 (AS-59) twin welding apparatus designed and produced by the All-Union Scientific Research Welding Institute and a control panel (Fig. 9). The use of the AS-59 welding apparatus is described and shown in Figures 6 - 8. By this method 1,000 m pipe line was completed in 1 shift by 1 centering team, 4 welding sets and 8 welders. There are 9 figures and 3 Soviet references.

ASSOCIATION: VNIIST (All-Union Scientific Research Welding Institute) and Institut elektrosvarki im. Ye.O. Patona (Institute of Electric Welding imeni Ye.O. Paton).

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S/193/61/000/010/003/008
A004/A101

AUTHORS: Marchenko, Yu.N., Yamphol'skiy, V.M.

TITLE: Equipment for the gas-electric welding of main pipe lines without back rings

PERIODICAL: Byulleten' tekhniko-ekonomicheskoy informatsii, no. 10, 1961, 23-29

TEXT: The authors describe a number of welding installations for the automatic CO_2-shielded electric welding of swivel and non-swivel joints without back rings developed by the Vsesoyuznyy nauchno-issledovatel'skiy institut po stroitel'stvu magistral'nykh truboprovodov (All-Union Scientific Research Institute for the Construction of Main Pipelines) VNIIST. The АСП -60 (ASP-60) welding automatic is intended for the welding of swivel joints, while the semi-automatic ПТВ-1 (PTV-1) welding pistol and the gas-electric AC-60 (AS-60) automatic have been designed for the welding of non-swivel joints. The ASP-60 automatic welds swivel joints of pipes from 529 to 1,020 mm in diameter without back rings with Св08Г2С (Sv 08G2S) electrode wire on direct current of reversed polarity. The automatic consists of the welding head, correction unit, anchor plate with magazine and control panel. The authors give a detailed description of the above units and

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point out that the electric system of the welding automatic provides for a supply of the control circuit directly from the welding current source with rigid external characteristics. The welding current and the CO_2-gas are supplied from the feeding stations consisting of the ЗП-7.5/30 (ZP-7.5/30) transformer and the CO_2-ramp mounted on a common frame. The current source is a ГСП-9000 (GSP-9000) or a Г-5 (G-5) generator driven by a 3-phase asynchronous motor of 7 - 10 kw and 3,000 rpm. To obtain the external characteristics with the GSP-9000 generator, a Р25-АМ (R25-AM) carbon voltage regulator is used, while the rigid external characteristics of the G-5 generator are obtained with the Р-5-М (R5-M) electromechanical voltage regulator. The CO_2-supply is switched on and off by a special plug cock mounted on the control panel of the automatic. The PTV-1 welding semi-automatic consists of the welding pistol, magazine unit and control panel. A reducer with two cylindrical gears is mounted on the pistol, the reducer being driven by the small-size МН-145 (MN-145) d-c shunt motor. The magazine unit can take up to 4 kg electrode wire and is fitted with a wire feed speed control rheostat, a voltage regulation rheostat and electromagnetic gas valve. The PTV-1 semi-automatic welder ensures a steady welding process on 120 - 250 amp currents at an arc voltage of 22-25 v. Two semi-automatics are supplied from the special АСДП -2х300 Г (ASDP-2x300G) assembly with two ГСГ-300 (GSG-300) welding genera-

Equipment for the gas-electric welding ...

tors, calculated for welding currents of up to 300 amp at a duty cycle of 65%; their regulation range is 80 - 300 amp. The generators are driven by the ЯаАЗ-204Г (YaAZ-204G) diesel engine. The РБ 200 (RB-200) ballast rheostat mounted on the current and gas supply station makes it possible to carry out manual welding with the GSG-300 generator. The AS-60 welding automatic consists of the welding head bogie, correction unit, double roller-and-bush chain with stretching device and electrode wire magazine. The aluminum reducer housing of the welding bogie is the basic supporting part of the welding automatic design. A special friction coupling makes it possible to displace the welder on the pipe by hand during setting operations. The welding bogie is fitted with a small-size d-c МУ-431 (MU-431) motor. The welding speed can be regulated within a range of 3 to 15 m/hour. The welding head design of the automatic AS-60 welder is analogous to the head of the ASP-60 welding automatic. The welding process is remote-controlled from a portable hand-operated control board. The following technical specifications are given:

Equipment for the gas-electric welding ...

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Parameters	ASP-60	AS-60	PTV-1
electrode wire diameter, mm	1.2-2.0	1.0-1.2	1.0-1.2
amperage, amp	170-400	90-200	120-250
electrode wire feed speed, m/hour	150-450	100-260	120-300
drive motor for the electrode wire feed mechanism:			
type	MU-431	MU-320	MN-145
voltage, v	27	27	24
power, w	400	100	16
motor driving the welding bogie travel mechanism			
weight, kg	-	MU-431	-
	25	20	0.9

According to estimates, the introduction of the ASP-60 welding automatics for the welding of swivel joints of main pipelines 1,500 km in length will save more than 140,000 rubles, while the use of the AS-60 automatic welder will save more than 100,000 rubles on a pipeline 720 mm in diameter and 1,500 km long. There are 3 figures and 1 table.

Card 4/4

ACCESSION NR: AR4015543 S/0137/63/000/012/E016/E016

SOURCE: RZh. Metallurgiya, Abs. 11E113

AUTHOR: Fal'kevich, A. S.; Marchenko, Yu.I.

TITLE: Automatic welding of straight sections of industrial and main pipelines

CITED SOURCE: Sb. Progressivn. metody* svarki na montazhn. rabotakh. M., 1962, 150-156

TOPIC TAGS: welding, automatic welding, pipe welding

TRANSLATION: The most promising method for automatizing the process of welding (W) straight pipe sections is the method of gas-electric welding in a protective gas atmosphere. The assembly of small-diameter pipes of Cr-Ni-stainless steel is widely performed with the aid of ATV automatic welders developed by NIAT (Nauchno-Issledovatel'skiy Institut Aviatsionnoy Tekhnologii -- Scientific Research Institute of Aviation Technology), as well as the AGN and MS-19 heads designed by NIIKhIMMASh (Nauchno-Issledovatel'skiy Institut Khimicheskogo Mashinostroyeniya -- Scientific Research Institute of Chemical Machine Building

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ACCESSION NR: AR4015543

TsNIITMASh (Tsentral'nyy Nauchno-Issledovatel'skiy Institut Tekhnologii i Mashinostroyeniya -- Central Scientific Research Institute of Technology and Machine Building). For the automatic welding of straight pipe sections of unalloyed steel in CO_2, the VNIIST (Vsesoyuznyy Nauchno-Issledovatel'skiy Institut po Stroitelstvu Magistral'nykh Truboprovodov -- Central Scientific Research Institute on the Construction of Main Pipelines) has developed the AS-60 automatic welder. Much attention is being devoted to the problems of automatic W of straight large-diameter pipe sections in the US. V. Fomenko.

DATE ACQ: 09Dec63 SUB CODE: ML ENCL: 00

Card 2/2

FAL'KEVICH, A.S.; MARCHENKO, Yu.I.

Gas-electric welding with simultaneous feeding of two arcs from a PSG-500 transformer. Avtom. svar. 16 no.2:74-76 F '63. (MIRA 16:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po stroitel'stvu magistral'nykh truboprovodov.
(Electric welding—Equipment and supplies)

MARCHENKO, Yu.I.

Some remarks on the theory of special functions. Ist.-mat. zbir. 4:131-138 '63. (MIRA 17:3)

FAL'KEVICH, A.S., kand. tekhn. nauk; MARCHENKO, Yu.I., inzh.

Current supply for gas-arc welding of main pipelines. Svar. proizv. no.7:32-34 Jl '63. (MIRA 17:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po stroitel'stvu magistral'nykh truboprovodov.

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EEC(t)/FBD/T/EWA(m)-2 Pf-4/Pi-4/Pl-4/Pn-4/Po-4/Peb IJP(c) WG

ACCESSION NR: AR5005662 S/0058/64/000/012/H012/H012

SOURCE: Ref. zh. Fizika, Abs. 12Zh77

AUTHORS: Marchenko, Yu. I.; Rubanik, V. P.

TITLE: On the influence of the delay of coupling forces on mutual synchronization of masers

CITED SOURCE: Sb. Tezisy dokl. 20 nauchn. sessii. Chernovitsk. un-t. Sekts. matem. n. Chernovtsy, 1964, 15

TOPIC TAGS: maser, maser synchronization, frequency locking, time delay

TRANSLATION: This is a summary of a paper dealing with the influence of the delay of the coupling forces on processes of mutual synchronization of masers. Identical generators are considered, and the coupling forces are assumed small. For the case of large de-

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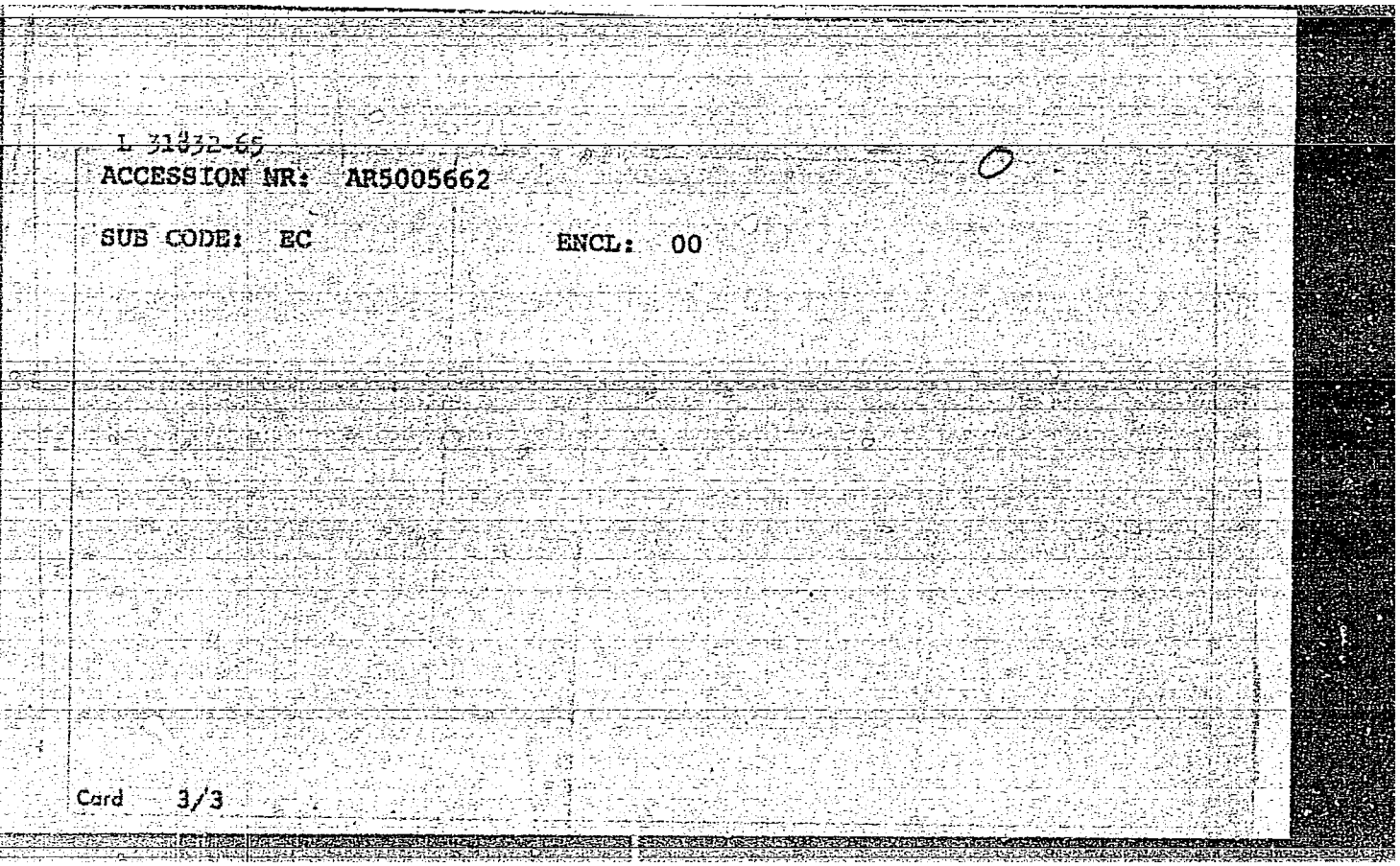
tunings of the generator frequencies relative to the transition frequencies, it is shown that there exists a certain detuning region with a single stable stationary mode of synchronous periodic oscillations. The influence of the delay of the coupling forces consists in the fact that the region of synchronization increases when the delay is close to 1/8 of the oscillation period. For the case of small detunings of the generator relative to the transition frequencies, it is shown that two regions of stable stationary synchronization modes are obtained under certain conditions. The corresponding frequency detuning regions are superimposed on one another, forming a single synchronization region. The generators can jump from one mode to the other. A delay close to 1/8 period in the coupling forces causes one of the modes to vanish and results in a mode characteristic of the case of large detunings. The authors note that the delay close to 1/8 of the oscillation period greatly improves the processes of mutual synchronizations of masers. A. Uspenskiy.



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ACCESSION NR: AR5005662

SUB CODE: EC ENCL: 00

Card 3/3

MARCHENKO, Yu.I.; RUBANIK, V.P.

Mutual synchronization of molecular generators. Izv. vys. ucheb. zav.; radiofiz. 8 no.4:679-687 '65. (MIRA 18:9)

1. Chernovitskiy gosudarstvennyy universitet.

L 26056-66 EWT(1)/EWA(h)

ACC NR: AP5022791 SOURCE CODE: UR/0141/65/008/004/0679/0687

AUTHOR: Marchenko, Yu. I.; Rubanik, V. P. 32 B

ORG: Chernovtsy State University (Chernovitskiy gosundarstvennyy universitet)

TITLE: On the mutual synchronization of molecular generators 25

SOURCE: IVUZ. Radiofizika, v. 8, no. 4, 1965, 679-687

TOPIC TAGS: molecular generator, oscillation

ABSTRACT: Although molecular generators possess a sufficiently high frequency stability and a low noise level, sometimes an even greater stability and noise-proof feature is needed which is achieved by mutual synchronization of several generators with nearly self resonant frequencies. The mutual synchronization of molecular generators has been investigated in the case of strong couples without delay. The effect of a small delay of coupling forces has also been studied on the mutual synchronization processes, both in the case of strong and weak couples. An expansion of the basic range of synchronization occurs and new synchronization cycles appear which did not exist in the absence of delay. During weak couplings a delay of 1/8 the oscillation period impairs mutual synchronization processes:

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ACC NR: AP5022791

the synchronization range decreases and in some cases leads to the appearance instead of one or two stable synchronization cycles and to the possible transition of generators from one oscillation cycle to another. Orig. art.has: 3 fig. and 19 equations.

SUB CODE: 20/ SUBM DATE: 09Nov62/ ORIG REF: 009/ OTHER REF: 000

Card 2/2

L 39105-66

ACC NR: AP6030357 SOURCE CODE: UR/0424/66/000/002/0174/0175

AUTHOR: Marchenko, Yu. I. (Chernovitsy); Rubanik, V. P. (Chernovitsy)

ORG: none

TITLE: Interaction of oscillating systems in the presence of a wave connection between them

SOURCE: Inzhenernyy zhurnal. Mekhanika tverdogo tela, no. 2, 1966, 174-175

TOPIC TAGS: electronic oscillator, electric vibrator

ABSTRACT: In technology, oscillating system are encountered which consist of simple oscillators, connected by certain types of communication lines. These are systems of mechanical vibrators on a common elastic base, which are used in vibrating machines, systems of electromagnetic generators separated from each other and resonators and certain other systems. In this article, an example is used to study the possibility of an approximate replacement of a wave connection with a delay connection. A mechanical model consisting of two self-exciting vibrators connected to an infinitely long crossbrace is analysed. It is determined that the replacement can be made with addition of terms to the equations to describe the dispersion of energy. If the infinitely long crossbrace is replaced in the model with a finite brace fastened at each end, standing waves will be formed and no equivalent delay connection can be substituted. However, if the brace is long and energy dispersion takes place, standing waves will not form and the replacement is possible. Orig. art. has: 7 formulas. [JPRS: 36,581]

SUB CODE: 09 / SUBM DATE: 29Mar65 / ORIG REF: 006

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L 04427-67 EWT(1) GW

ACC NR: AR6019881 (N) SOURCE CODE: UR/0169/66/000/002/V004/V004

AUTHOR: Zubkovich, S. G.; Marchenko, Yu. I.

TITLE: Possibility of determining some characteristics of sea swell by means of radio engineering equipment on board an aircraft

SOURCE: Ref. zh. Geofizika, Abs. 2V33

REF SOURCE: Sb. Primeneniye radiofiz. metodov, v okeanogr. i ledov. issled. L. 1964, 79-88

TOPIC TAGS: sea wave, airborne radar equipment, radar observation

ABSTRACT: It is pointed out that, in principle, it is possible to determine the characteristics of sea waves on the basis of physical laws governing the reflection of short radio waves from an uneven sea surface (statistically a surface with random roughnesses). Sea-wave height $H_{3\%}$ can be determined on the basis of the following functional relationship between the desired parameter and the value of the coherent component u_m of the radio-wave reflected signal in the 1-m

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ACC NR: AR6019881

band (1—20 m): $u_m = \frac{A_0}{R} g(\beta) \exp\left[-\left(\frac{1,6\,l/_{3K}}{\lambda}\right)^2\right]$, where A_0 is the constant determined by radar parameters, $g(\beta)$ is the power characteristic of radar antenna directivity R is the radar altitude above sea level, and λ is the length of radio waves. The dependence of the radio-wave reflection index on the sighting angle opens the way for determining the effective (mean) wave ascent and, therefore, the type of disturbance (wind disturbance or storm swell). To this end, the author proposes airborne radar equipment in the 1-cm band, which with a narrow radiation pattern (2—4°), whose axis is directed vertically downward, can deviate from the vertical by 40—50°. Moreover, the use of this radar makes it possible to determine the direction of developing wind-wave propagation by the maximum reflected radio-signal transmission (by scanning over the azimuth of the antenna beam shifted to a constant angle of 10—15°). The proposed method can be used in observations of the surface roughness of sea ice. Bibliography of 10 titles. K. Sirotov. [Translation of abstract] [DW]

SUB CODE: 08, 09/

Card 2/2 egh

L 11199-67 EWT(1)/FSS-2 GW/WR (N)
ACC NR: AR6020068 SOURCE CODE: UR/0124/66/000/001/B064/B064

28

AUTHOR: Zubkovich, S. G.; Marchenko, Yu. I.

TITLE: Possibilities for determining some characteristics of sea swell using electronic equipment mounted in aircraft

SOURCE: Ref. zh. Mekhanika, Abs. 1B456

REF SOURCE: Sb. Primeneniye radiofiz. metodov v okeanogr. i ledov. issled., L., 1964, 79-88

TOPIC TAGS: sea ice, wave mechanics, electronic equipment, airborne radar

ABSTRACT: The authors point out the theoretical possibility of determining the characteristics of sea waves on the basis of the physical relationships for reflection of short radio waves from the disturbed surface of the sea which is considered from the statistical standpoint as a surface with random roughness. The height of the sea waves $H_{3\%}$ may be determined on the basis of the following functional relationship for the unknown parameter in terms of the coherent component U_m of the reflected signal of radio waves in the dead region (1-20 m):

$$U_m = \frac{A_0}{R} g(\beta) \exp\left[-\left(\frac{1.6H_{3\%}}{\lambda}\right)^2\right]$$

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ACC NR: AR6020068 O

where A_0 is a constant determined by the parameters of the radar unit, $g(\beta)$ is the directional characteristic of the radar antenna with respect to power, R is the altitude at which the radar unit is located above the surface of the sea, λ is the radio wavelength. The relationship between the coefficient of radio wave reflection and the sighting angle opens up a way for determining the effective (average) slope of the waves and consequently the type of swell (wind swell or dead surge). It is suggested for this purpose that a radar unit in the centimeter range should be mounted in aircraft with a narrow directional pattern (2-4°) and an axis directed vertically downward which may be deflected from the vertical by an angle of 40-50°. This same unit may be used for determining the direction of propagation of rising waves produced by the wind from the direction of arrival of the maximum reflected radio signal (with azimuthal scanning of an antenna beam shifted through a constant angle of 10-15°). It is pointed out that the proposed method may be used for determining the surface roughness of sea ice. Bibliography of 10 titles. K. M. Sirotov. [Translation of abstract]

SUB CODE: 08, 09

Card 2/2 jb

ROGOZHNIKOV, A.N., inzh.; MARCHENKO, Yu.P., inzh.

Using an emulsion diluent of oil paints in finishing operations. Stroi. truboprov. 7 no.5:13-14 My '62. (MIRA 16:6)

1. Trest Omskneftеprovodstroy, Omsk.
(Emulsions) (Thinner(Paint mixing))

MARCHENKO, Yu.V., inzh. (Novocherkassk)

Improvement in the equipment and electric networks of M60 electric locomotive. Elek. i tepl. tiaga 4 no.11:32-35 N '60.
(MIRA 13:12)

(Electric locomotives)

MARCHENKO, Yuriy Valentinovich; NIKITIN, Geniy Nikolayevich; BYSTRITSKIY, Kh.Ya., inzh., retsenzent; YAKOVLEV, D.V., inzh., red.; RAKOV, V.A., inzh., red.; USENKO, L.A., tekhn. red.

[Maintenance and operation of electric a.c. locomotives] Obsluzhivanie i ekspluatatsiia elektrovozov peremennogo toka. Moskva, Vses.izdatel'sko-poligr. ob"edinenie M-va putei soobshcheniia, 1961. 234 p. (MIRA 15:2)
(Electric locomotives)

MARCHENKO, Yuriy Valentinovich; MAKSIMOV, N.V., kand. tekhn. nauk, red.

[Maintenance and operation of VL60 and VL80 electric locomotives] Obsluzhivanie i ekspluatatsiia elektrovozov VL60 i VL80. Moskva, Transport, 1965. 255 p.
(MIRA 18:2)

MINCHEVSKI, Ye.; FRYDEL', Ya.; MARCHENKO, Z.

Rapid method of determining barium in glasses. Zav.lab. 27 no.3:277-279 '61. (MIRA 14:3)

1. Varshavskiy tekhnologicheskiy institut.
(Barium—Analysis) (Glass)

MARCHENKO, Zygmunt [Marczenko, Z.]; MINCHEVSKI, Yezhy [Minczewski, J.]

Certain properties of formaldoxime and its reactions with metal ions. Zhur.anal.khim. 17 no.1:23-27 Ja-F '62. (MIRA 15:2)

1. Chair of Analytical Chemistry, Polytechnical Institute, Warsaw, Poland.
(Metals--Analysis) (Chemical tests and reagents)

VASIL'YEV, A. (Moskva); MATYUSHIN, A. (Moskva); MARCHENKOV, L. (Voronezh); AGAFONOV, V. (Krasnodarskiy kray); SMELOV, M. (Moskva); KRAMER, A. (Leningrad); RETSENS, L.; KAYROD, V.; YEFREMENKOV, M. (Moskovskaya obl.)

Suggestions of the readers. Radio no.8:46 Ag '62. (MIRA 15:8)
(Radio--Equipment and supplies)

MARCHENKOV, R.

Marchenkov, R. "Fuller utilization of reserves in the improvement of industry work," Bol'shevik Sov. Latvii, 1948, No. 22, p. 25-33

SO: U-3850, 16 June 53, (Letopis 'Zhurnal 'nykh Statey, No. 5, 1948).

RODIONOV, A. I., MARCHENKOV, V.F.

Testing sieve plates with two perforations. Zhur.prikl.khim. 33 no.5:1101-1108 My '60. (MIRA 13:7)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni D.I. Mendeleyeva.

(Plate towers)

RODIONOV, A.I.; MARCHENKOV, V.F.

Mass transfer on sieve plates with two perforations. Zhur. prikl. khim. 33 no.9:2029-2035 S '60. (MIRA 13:10)

1. Moskovskiy khimiko-tekhnologicheskiy institut im. D.I. Mendeleyeva.

(Mass transfer) (Plate towers)

MARCHENKOV, V. F.

"Aminoacid Content of Human Muscle Protein,"

SO: Biokhim., 10, No. 1, 1945.

Mbr., Chair Biological & Organic Chemistry, 2nd Moscow Med. Inst., -1945-.

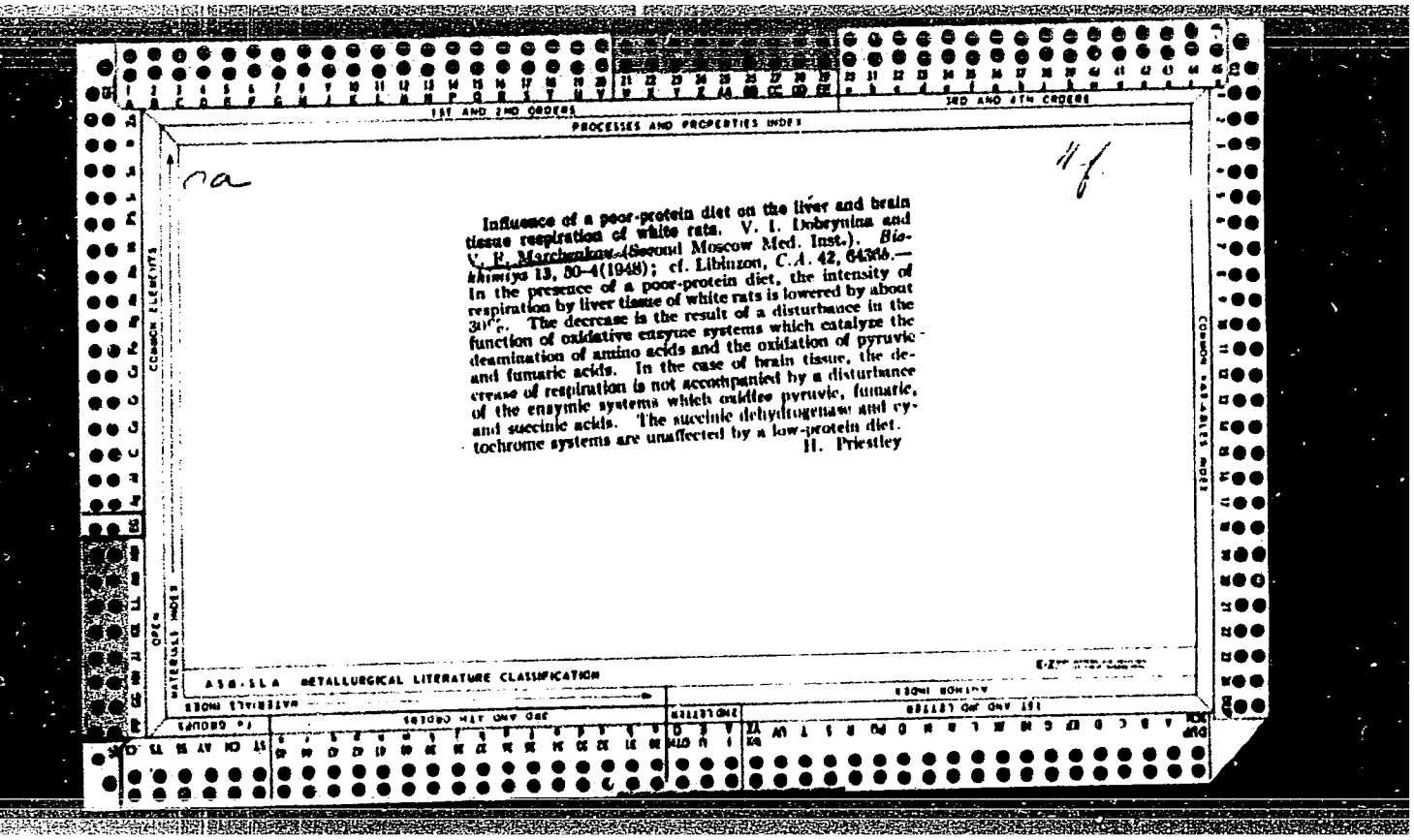
DOBRYNINA, V. I.; MARCHENKOV, V. F.

Moscow, -1947-.

Mor., Chair Biochemistry, 2nd Moscow Med. Inst., -1947-.

"Effect of nutritional protein deficiency on the respiration of liver and brain tissues of white rats," Biokhimiya, 13, No. 1, 1948.

BML Guide, 1:7, 1948.



PROCESSES AND PROPERTIES INDEX

Influence of a poor-protein diet on the liver and brain tissue respiration of white rats. V. I. Dobrynina and V. P. Marchenkova (Second Moscow Med. Inst.). *Biokhimiya* 13, 50–4(1948); cf. Libinzon, *C.A.* 42, 6436b.—In the presence of a poor-protein diet, the intensity of respiration by liver tissue of white rats is lowered by about 30%. The decrease is the result of a disturbance in the function of oxidative enzyme systems which catalyze the deamination of amino acids and the oxidation of pyruvic and fumaric acids. In the case of brain tissue, the decrease of respiration is not accompanied by a disturbance of the enzymic systems which oxidize pyruvic, fumaric, and succinic acids. The succinic dehydrogenase and cytochrome systems are unaffected by a low-protein diet.
H. Priestley

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

MARCHENKOV, V. F., Physician

"disruption of Certain Oxidizing Processes in the Liver of White Rats in a Case of Deficiency of Albumins in Food." Thesis for degree of Cand. Medical Sci. Sub 30 Jun 50 Second Moscow State Medical Inst imeni I. V. Stalin

Summary 71, 4 Sep 52, Dissertations Presented for Degrees in Science and Engineering in Moscow in 1950. From Vechernyaya Moskva, Jan-Dec 1950.

MARCHENKOV, V.R., inzhener.

Self-synchronization in hydroelectric power stations. Elek.sta. 28 no.9:87-89 S '57. (MIRA 10:11)
(Hydroelectric power stations)

MARCHENKOV, V.S.

Methods for evidencing the effect of the scalar factor on the limited resistance of steel. Zav. lab. 30 no.10:1256-1257 '64. (MIRA 18:4)

1. Khar'kovskiy institut gornogo mashinostroyeniya, avtomatiki i vychislitel'noy tekhniki.

ACC NR: AP7001939 SOURCE CODE: UR/120/66/000/006/0055/0060

AUTHOR: Nekhay, A.P.; Marchenkov, V.V.

ORG: Physico-technical Institute, AN SSSR, Leningrad (Fiziko-tekhnicheskiy institut AN SSSR)

TITLE: A digital gain stabilizing circuit for a semiconductor gamma spectrometer

SOURCE: Pribory i tekhnika eksperimenta, no. 6, 1966, 55-60

TOPIC TAGS: pulse height analyzer, multichannel analyzer

ABSTRACT:

A 1024-channel pulse height analyzer with a gain-stabilizing loop is shown in Fig. 1. The amplifier gain is stabilized by the loop consisting of counter (6), which tallies the number of pulses from the astable multivibrator (5), which in turn is proportional to the height of the reference pulse from the generator (11). The amount by which the reference pulse misses its intended channel constitutes the error signal, which is formed by circuit (7) whose inputs are derived from six higher-order stages of counter (6). The error is applied to counter (8) which integrates it and applies it to the number-to-voltage converter. This converter changes the astable multivibrator output frequency in the direction of diminishing error. If the

Card 1/2 UDC: 539.1.075

ACC NR: AP7001939

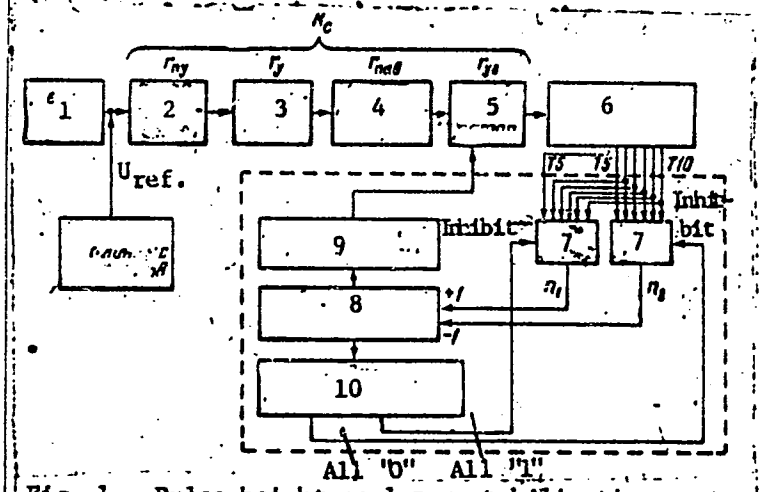


Fig. 1. Pulse height analyzer stabilization system

1 - Semiconductor Ge(Li) detector; 2 - low noise preamplifier; 3 - amplifier; 4 - amplitude-to-time converter; 5 - gated voltage-controlled astable multivibrator; 6 - ten-state binary counter; 7 - coincidence circuits; 8 - eight-bit reversible counter; 9 - number-to-voltage (ladder attenuator D/A) counter; 10 - counter-locking circuit; 11 - reference pulse generator.

amplifier gain is measured by the number of channels n by which the reference pulse misses its intended channel, then the corrective action of a single pulse at the input to counter (8) causes this gain to change by 0.25 channels. The lock-in range of the stabilizing loop is limited to deviations of not more than 20 channels or 2% of full scale.

SUB CODE: 18/ SUBM DATE: 17Nov65/ ORIG REF: 002/ OTH REF: 003
ATD PRESS: 5113

Card 2/2

BELETSKIY, F.A., dots., kand. fiz.-matem.nauk; BIRKUN, N.Ye., inzh.; KAZANOV, V.A., inzh.; KLYUSHIN, S.M., dots.; KRUCHININ, V.L., inzh.; MARCHENKOV, Ya.P., dots.; PISKAREV, V.S., inzh.; RUTSKIY, A.I., inzh.; SOKOLOV, N.M., dots., kand. tekhn. nauk; SOLUYANOV, L.N., inzh.; SHKARBANOV, Petr Fedorovich, dots., kand. tekhn. nauk; PANOV, V., red.; LUKASHEVICH, V., tekhn.red.

[Handbook for electricians] Spravochnik elektrika. Saratov, Saratovskoe knizhnoe izd-vo, 1963. 458 p. (MIRA 17:1)

Marchenkova, F. G.

USSR/Microbiology - Medical and Veterinary Microbiology F-4

Abs Jour : Referat Zhurn - Biol., No 16, 25 Aug 1957, 68691

Author : Marchenkova, F.G.
Title : Comparative Evaluation of Various Methods of Obtaining Immune Sera to Yeast-Like Fungi.

Orig Pub : Eksperim. i klinikh. issledovaniya. II, L. (Leningrad), Medgiz, 1956, 163-164

Abstract : The accumulation of antibodies in rabbit blood serum and the mechanism of immunization to yeast and yeast-like fungi under different methods of immunization were studied. Prior to immunization the rabbit blood serum was tested for RSK in all cases; a spontaneous positive result in the rabbit was excluded from the tests. After a 5-fold introduction of the antigen, a second course of immunization was carried out in 3-4 months. The specific serum titer attained a level of 1:320-1:640, the group record did not exceed 1:40, rarely 1:80. The author

Card 1/2 - 90 -

Abs Jour : Referat Zhurn - Biol., No 16, 25 Aug 1957, 68691

considers that to obtain a specific serum there must be a protracted immunization of the animal, up to 1-2 years, first with dead, and then with live cultures. The most active antigen proved to be a culture of Torula and Mycoderma, and the least active, all the Candida groups.

Марченкова, Ф. Г.

USSR /Microbiology. Medical and Veterinary Microbiology. F-6

Abs Jour: Referat. Zh.-Biol., No. 9, 1957, 35789

Author : Gruzdova, A.I.; Marchenkova, F.G.

Title : A case of Atypical Genital Candidamycosis

Orig Pub: V sb.: Eksperim. i klinich. issledovaniia II, L, medgiz, 1956, 210-212

Abstract: No abstract.

Card 1/1

MARCHENKOVA F. G.

USSR / Pharmacology, Toxicology, Chemotherapeutic Agents U-7

Abs Jour : Ref. Zh. Biol., No 2, 1958, No 8109

Author : Kashkin, P.N., Bezborodov, A.M., Yelinov, N.P., Kashkin, K.P., Marchenkova, F.G., Tzyganov, V.A., Yamshchikov, V.P.

Inst :

Title : Materials on the Analysis of Failures in Antibiotic Therapy

Orig Pub : V. Sb. Antibiotiki. Eksperim.-Klinich. Izuch. M., 1958, 274-290

Abstract : Among the causes for failure in antibiotic therapy, the authors have emphasized bacterial resistance, appearance of moniliasis, and hormesis. An increased resistance to antibiotics is also characteristic of the facultative pathogens which more frequently develop a group tolerance. The streptomycin and biomycin resistant microorganisms

Card : 1/3

Card : 2/3

USSR / Pharmacology, Toxicology, Chemotherapeutic Agents U-7

Abs Jour : Ref. Zh. Biol., No 2, 1958, No 8109

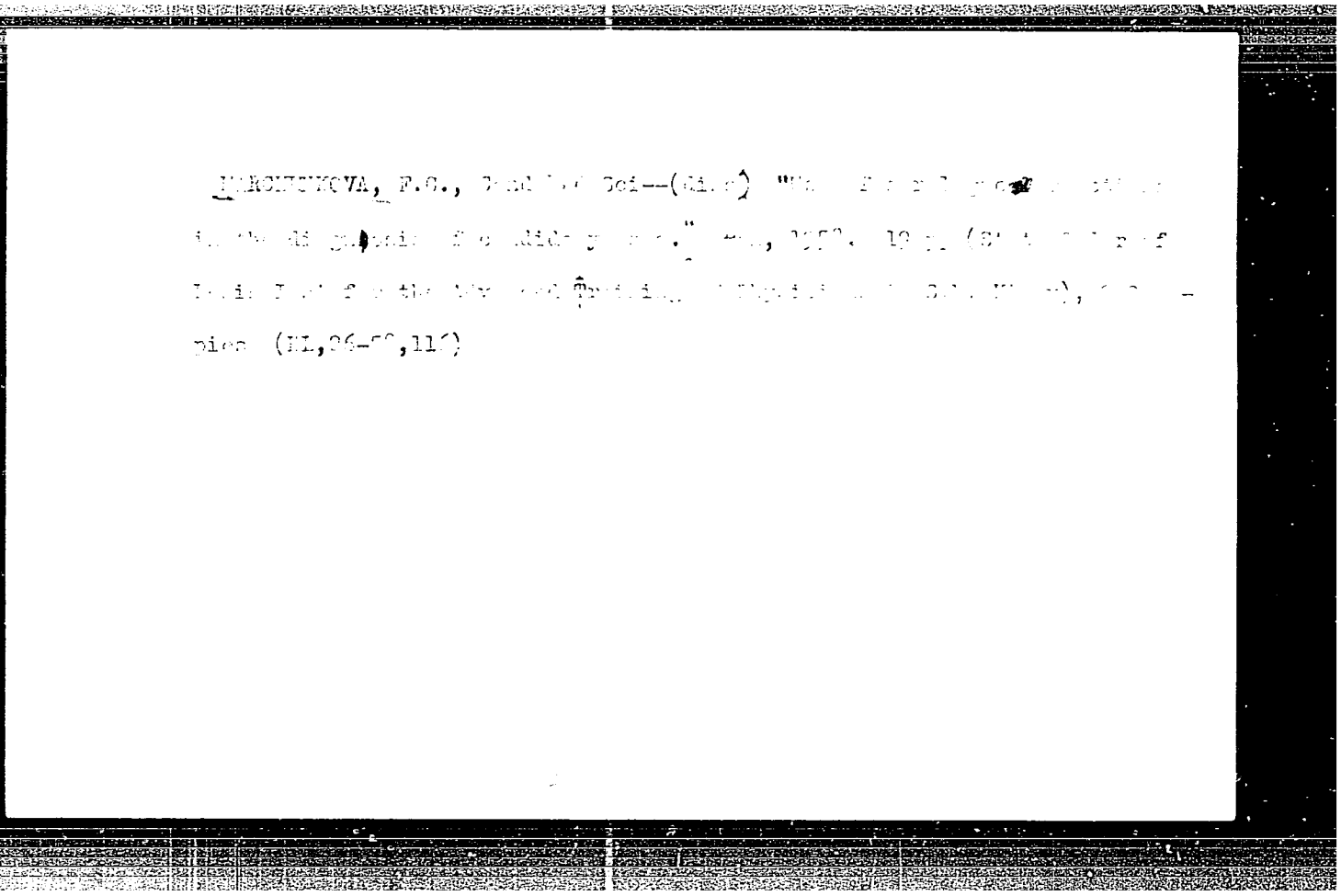
Abstract : aureomycin in various concentrations have, actually, increased the growth of Candida in special test-tube experiments. Rabbits with experimental moniliasis succumbed to infection after 2 - 5 days if treated with penicillin, streptomycin, biomycin or levomycin, and after 30-35 days if untreated. The phenomena of hormesis, i.e. the destruction of the normal microflora of the skin and mucous membranes, is associated with irrational antibiotic therapy. A number of patients demonstrated absence of coliform bacilli in cultures, proliferation of Proteus, alkali-forming and putrefactive microorganisms the toxins of which cause toxemia on reaching the blood stream.

Card : 3/3

MARCHENKOVA, E.G.; TSYGANOV, V.A. (Cand. of Bio. Sci.); YAMSHCHIKOV, V.P.; BEZBORODOV, A.M.; YELINOV, N.P. (Cand. of Bio. Sci.); KASHKIN, K.P.;

"Materials on Analysis of Failures in Treatment With Antibiotics,"

p. 274 Ministry of Health USSR Proceedings of the Second All-Union Conference on Antibiotics, 31 May - 9 June 1957. p. 405, Moscow, Medgiz, 1957.



1215. SEROLOGIC TESTS IN THE DIAGNOSIS OF CANDIDA MYCOSES (Russian text) - Marchenkova F. G. - VESTN. DERM. I VENER. 1958, 32/3 (14-19) Tables 1

A study was made of the antigenic properties of 4 yeast strains (Saccharomyces, Torula, Debariomyces and Mycoderma) and of 5 Candida strains, distributed over 2 groups of rabbits. The complement fixation reaction proved more specific than the agglutination test. In 209 patients with candidiasis, the serological reactions were 112 times positive, 27 times slightly positive and 70 times negative. In 39 patients with visceral forms included in this series, the reactions were 30 times positive, 6 times slightly positive and 3 times negative. In 9.8% of the 1,273 control sera, the serological tests were positive. According to these data, the complement fixation test is of diagnostic value in chronic; disseminated and visceral forms of candidiasis.

Balabanoff - Sofia

KOKUSHINA, T.M.; MARCHENKOVA, F.G.

Change in the phagocytic reaction in mice under the influence of antibiotics. Antibiotiki 5 no.1:115-119 Ja-F '60. (MIRA 13:7)

1. Leningradskiy nauchno-issledovatel'skiy institut antibiotikov.
(ANTIBIOTICS) (PHAGOCYTOSIS)

5(2)

AUTHORS: Tsintsevich, Ye.P., Alimarin, I.P. SOV/55-58-3-27/30 and Marchenkova, L.F.

TITLE: The Behavior of Gallium and Aluminum Under Ion Exchange in Presence of Some Complex-Forming Substances (Povedeniye galliya i alyuminiya v usloviyakh ionnogo obmena v prisutstvii nekotorykh kompleksoobrazuyushchikh veshchestv)

PERIODICAL: Vestnik Moskovskogo universiteta, Seriya matematiki, mekhaniki, astronomii, fiziki, khimii ,1958,Nr 3,pp 221-227 (USSR)

ABSTRACT: The authors investigated the behavior of Ga^{3+} and Al^{3+} in presence of tartaric acid and malic acid under static conditions for acid pH - values. It was stated that the separation of them is not possible in presence of the mentioned acids. A separation of gallium and aluminum by ion exchange proved to be possible in presence of oxalic acid for pH 4.0 as well as in some other cases.

Card 1/2

The Behavior of Gallium and Aluminum Under Ion Exchange in Presence of Some Complex-Forming Substances SOV/55-58-3-27/30

There are 4 figures, 6 tables, and 5 references, 3 of which are Soviet, 1 German, and 1 Swiss.

ASSOCIATION: Kafedra analiticheskoy khimii (Chair of Analytical Chemistry)

SUBMITTED: July 6, 1957

Card 2/2