

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001548030002-8

SERGENEVA, E.V.

Calculation of the vertical profile of the turbulence coefficient in  
a boundary layer by the graphic method. Trudy Len.gidromet.inst. no.18:  
124-128 '63. (MIRA 18:1)

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CIA-RDP86-00513R001548030002-8"

STOEV, Boian, inzh.; SERGEV, Tsanko

Standardization, normalization, and unification in the Georgi  
Dimitrov State Machine-Building Factory, Ruse.  
Ratsionalizatsiia 14 no.10:34-36 '64.

SERGENCEV, O.S.

Railroad bridge maintenance workers answer with deeds to the  
appeal of the party. Put' put.khoz. 5 no.11:9 N '61.

(MIRA 14:12)

1. Nachal'nik Tyul'kubeevskoy distantsii Kazakhskoy dorogi.  
(Railroads-Employees)

Sergescu, P.

Sergescu, P. Sur une proposition de Cayley. Bull. Sci. Ecole Polytech. Timișoara 11, 22-29 (1943).

Cayley enunciated the following proposition, which is easily established. If  $L_i: a_i x + b_i y + c_i = 0$ ,  $i = 1, 2, \dots, 6$ , are lines in a plane, a condition that the intersection points of  $L_1$  and  $L_2$ , of  $L_3$  and  $L_4$ , and of  $L_5$  and  $L_6$  are collinear is that

$$\begin{vmatrix} a_1 & b_1 & c_1 & a_1 & b_1 & c_1 \\ a_2 & b_2 & c_2 & a_2 & b_2 & c_2 \\ a_3 & b_3 & c_3 & 0 & 0 & 0 \\ a_4 & b_4 & c_4 & 0 & 0 & 0 \\ 0 & 0 & 0 & a_5 & b_5 & c_5 \\ 0 & 0 & 0 & a_6 & b_6 & c_6 \end{vmatrix} = 0.$$

The author derives a generalization of this result in space of  $n$ -dimensions, in the form of a determinant of order  $n(n+1)$ , and shows its equivalence to the  $n$ -varied determinant of the coordinates of the intersections.

R. A. Johnson (Brooklyn, N. Y.).

Scientific and Technical Reviews,

Vol. 1, No. 1

Sergescu, Pierre

Sergescu, Pierre. Sur les relations mathématiques franco-  
roumaines. Bull. Sci. Roumain 1, 5-17 (1952).

Source: Mathematical Reviews,

Vol. 13 No. 9

ГИАНДЕРСОН, Л. СОЛЛІСІНІСІСІ,

RUSAKOV, Sergey Ivanovich; SERGEVNIK, Ivan Vasil'yevich; EPPEL', Sergey  
Sergeyevich; PLEMYANNIKOV, M.N., redaktor; ARKHIPOV, N.N., inzhener,  
retsenzent; EL'KINA, E.M., tekhnicheskiy redaktor

[Industrial sewing equipment] Oborudovanie shveinykh fabrik. Moskva,  
Gos.nauchno-tekhn.izd-vo Ministerstva promyshlennyykh tovarov shirokogo  
potrebleniia SSSR, 1955. 463 p.  
(MIRA 9:1)  
(Sewing machines)

SERGEVNIN, V.V.

Atypical course of acute intestinal obstruction. Khirurgia,  
Moskva no.1:66-68 Ja '55. (MLRA 8:9)  
(INTESTINAL OBSTRUCTION,  
atypical case)

SERGEVNIN, V.V.

Sarcoma in a newborn. Khirurgiia 33 no.4:150-151 Ap '57. (MLRA 10:?)

1. Iz khirurgicheskogo otdeleniya bol'nitsy g. Frunze.  
(SARCOMA, in inf. and child  
of hip in newborn)  
(INFANT, NEWBORN, dis.  
sarcoma of hip)  
(HIP, neoplasms  
sarcoma in newborn)

SERGEVNIN, V.V.

Surgical treatment of goiter [with summary in English].  
Xhirurgia 34 no.10:75-78 '58 (MIRA 11:11)  
(GOITER, surg.  
technic (Rus))

KRAYTSE, L.I.; SERGEVNIN, V.V.; BENENSON, M.P.; POGREBNYAK, V.S.

Effectiveness of splenoportography in metastasis symptoms of  
cancer of the stomach and pancreas. Vest.khir. no.9:45-49 '61.  
(MIRA 15:3)

1. Iz 3-y kafedry khirurgii TSentral'nogo instituta usovershenst-  
vovaniya vrachey (zav. -- prof. V.I. Kazanskiy) i rentgeno-radio-  
logicheskogo otdeleniya (nach. - dotsent S.A. Sviridov) na baze  
TSentral'noy klinicheskoy bol'nitsy Ministerstva putey soobshcheniya.  
Adres avtorov: Moskva, Volokolamskoye shosse, d.34, TSentral'naya  
klinicheskaya bol'nitsa Ministerstvo putey soobshcheniya.  
(STOMACH--CANCER) (PANCREAS--CANCER)  
(SPLEEN--RADIOGRAPHY) (PORTAL VEIN--RADIOGRAPHY)

MAKARENKO, T.P., prof.; SERGEVNIN, V.V.; MALYSHEV, V.D.

Principal problems of anesthesia in patients with functional  
disorders of the liver. Khirurgiia no.11:20-28 '61.  
(MIRA 14:12)

1. Iz 3-y kafedry khirurgii (zav. - prof. V.I. Kazanskiy)  
TSentral'nogo instituta usovershenstvovaniya vrachey na baze  
TSentral'noy klinicheskoy bol'nitsy (nach. - zasluzhennyy  
vrach RSFSR V.N. Zakharchenko) Ministerstva putey soobshcheniya.  
(ANESTHESIA) (LIVER—DISEASES)

KOLESNIKOV, Ivan Stepanovich; PUTOV, Nikolay Vasil'yevich; SOKOLOV,  
Sergey Nikolayevich

[Conservative resections of the lungs in tuberculosis] Eko-  
nommye rezektsii legkikh pri tuberkuleze. Leningrad, Me-  
ditsina, 1965. 239 p.  
(MIRA 18:4)

SOV/129-58-12-6/12

AUTHORS: Blanter, M.Ye., Doctor of Technical Sciences, Professor,  
Kulakov, N.A., Sergeychev, I.M., Mikhin, T.A. and  
Faynbron, S.D., Engineers

TITLE: Hardening in Water-air Mixtures (Zakalka v vodo-  
vozdushnykh smesyakh)

PERIODICAL: Metallovedeniye i Obrabotka Metallov, 1958, Nr 12,  
pp 29 - 34 (USSR)

ABSTRACT: The authors investigated systematically the influence of the main factors on the cooling capacity of water-air mixtures for hardening for the purpose of obtaining quantitative characteristics which can be used as a basis for a controlled technological process. Use of water-air mixtures of various compositions permits obtaining a wide range of cooling regimes, from cooling in a jet of pure air up to quenching in a water jet. For obtaining the water-air mixtures, a nozzle with a special end piece was used, the purpose of which was to widen the atomising angle. The air pressure was maintained by means of a direct-action pressure regulator. The water-flow rate between 18 and 116 litres/hour was measured with an RS-5 rotameter and the flow rate of 185 to 1 030 litres/hour was measured by means of a rotameter RS-7 with an accuracy of 1.5-2.5%.

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SOV/129-58-12-6/12

## Hardening in Water-air Mixtures

Special filters were fitted to prevent clogging-up of the water-supply system. Cooling curves were recorded by means of a potentiometer with visual control of the operation of the thermocouples. At first, the problem of the optimum distance of the spraying nozzle from the surface of the plate to be hardened was investigated and the obtained relations are graphed in Figure 3. Owing to great practical difficulties involved in systematic investigation of massive steel bodies, the authors used a method of thermal modelling, as proposed by A. I. Nemchinskiy (Ref 2), which is based on the principle that in the case of cooling of bodies of sufficient length, the cooling takes place as a result of heat transfer from the longitudinal surface whilst the heat transfer between adjacent volumes of approximately equal temperature is negligible. The heat-exchange conditions were simulated by means of an analogue, a sketch of which is shown in Figure 4. The cooling curves obtained under conditions of thermal modelling of water are graphed in Figure 5. In view of the fact that the objective index of the cooling capability is the magnitude of the cooling speed, the obtained cooling curves were differentiated graphically

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## Hardening in Water-air Mixtures

SOV/129-58-12-6/12

by the method of plotting normals, described in an earlier paper of one of the authors (Ref 4). The influence of the degree of humidification of the air on the cooling speed is graphed in Figure 6; it can be seen that the cooling speed will be highest at 800 °C except for the water-flow rate of 200 litres/hour, in which case the maximum cooling speed is at 700 °C. With increasing humidification, the rate of cooling increases, as can be seen from Figure 7. The influence of the air pressure on the cooling speed is graphed in Figure 8. The influence of the thickness of the cooled steel body on the cooling speed is graphed in Figure 9. The influence of the degree of humidification on the depths of the hardened layer is graphed in Figure 10. It was established in the experiments that the cooling power of the investigated mixtures varies within a wide range and cooling in oil is equivalent to cooling in slightly humidified air with a water-flow rate of about 20 litres/hour under the same conditions. It was experimentally established that the optimum distance from the spraying nozzle to the surface to be cooled equals 500 mm, while the optimum air pressure

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SOV/129-58-12-6/12

## Hardening in Water-air Mixtures

equals 3 atm. For the particular case of hardening of massive bodies with sharp cross-section changes, the maximum permissible water-flow rate for the steel 5KhNV equals 100 litres/hour and the active cooling surface

equals  $0.05 - 0.20 \text{ m}^2$  per each atomiser nozzle of the applied design. It is shown that investigation of the pertaining relations can be extended to bodies of 400 - 700 mm thick. Thus, use of special metering apparatus permits working out of a correctly controlled method of hardening by means of water-air mixtures, ensuring standard heat-treatment results whereby control of the process can be made fully automatic. Due to the great simplicity of the equipment, the method can be recommended as a completely satisfactory and economic substitute for hardening in oils and other special media.

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Hardening in Water-air Mixtures

SOV/129-58-12-6/12

There are 10 figures and 5 references, 4 of which  
are Soviet and 1 German.

Card 5/5

SERGEYCHEV, I. M.

PHASE I BOOK EXPLOITATION

SOV/5091

Sergeychev, Ivan Mikhaylovich, and Aleksey Mikhaylovich Pechkovskiy  
Termicheskaya obrabotka rezhushchego i izmeritel'nogo instrumenta ('Heat Treatment  
of Cutting and Measuring Tools') Moscow, Mashgiz, 1960. 305 p. Errata slip  
inserted. 6,000 copies printed.

Reviewer: D.M. Kostenko; Ed.: N.R. Izakov, Candidate of Technical Sciences; Ed. of  
Publishing House: V.V. Rzhavinskiy, Engineer; Tech. Ed.: V.D. El'kind; Managing  
Ed. for Literature on Metalworking and Machine-Tool Making; V.I. Mitin, Engineer.

PURPOSE: This book is intended for technical personnel concerned with the heat  
treatment of tools.

COVERAGE: The authors summarize results of experience gained over a number of years  
by numerous modern machine-building plants in the heat treatment of tools. The  
following are discussed: the classification of heat-treatment processes applied  
to cutting and measuring tools, scientific developments related to the proper  
selection of heat-treatment processes and modern heating equipment, recommen-  
dations regarding the utilization of standard tools by heat-treatment operators,

Card 1/4

BLANTER, M. E.; KULAKOV, N. A.; SERGHELICEV, I. M. (Sergeychev, I. M.)

Hardening of steel massive items in the mixtures of air and water.  
Analele matalugie 16 no.1:170-182 Ja-Mr '62

PHASE I BOOK EXPLOITATION  
SOV/5511  
Nauchno-tehnicheskoye obshchestvo mashinostroeniya i noy proizvodstvennosti.  
Kiyevskoye obladannoye pravleniye.

Metallovedeniye i torgovlia Metallurgicheskaya obrabotka (Physical Metallurgy and Heat Treatment of Metals). Novaya, Nashchiz, 1961. 350 p. Sverata siip. Inserted. 5,000 copies printed.

Sponsoring Agency: Gosudarstvennyy nauchno-tehnicheskyy komitet  
Soveta Ministriv URSRR. Nauchno-tehnicheskoye obshchestvo  
mashinostroeniya i noy proizvodstvennosti. Kiyevskoye oblastnoye  
pravleniye.

Editorial Board: M. P. Braun, Doctor of Technical Sciences, I. Ya. Dektjary, Doctor of Technical Sciences, L. A. Drayner, Doctor of Technical Sciences, I. S. Kamenchikayev, Engineer, Yu. A. Har'kovsky, Candidate of Technical Sciences, V. G. Pernyukov, Doctor of Technical Sciences, and A. V. Chernovoi, Candidate of Technical Sciences; Ed.: M. S. Sorokai, Tech. Ed.: M. S. Garmatskaypol'skaya; Chief Ed., Nashchiz (Southern Dept.): V. K. Serdyuk, Engineer.

Card 1/20

PURPOSE: This collection of articles is intended for scientific workers and technical personnel of research institutes, plants, and schools of higher technical education.

COVERAGE: This collection contains papers presented at a convention held in Kiev on problems of physical metallurgy and methods of the heat treatment of metals applied in the machine industry. Phase transformations in metals and alloys are discussed, and results of investigations conducted to ascertain the effect of heat treatment on the quality of metal are analyzed. The possibility of obtaining metals with given mechanical properties is discussed, as are problems of steel brittleness. The collection includes papers dealing with kinetics of transformation, heat treatment, and properties of cast iron. No personalities are mentioned. Articles are accompanied by references, mostly Soviet.

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## Physical Metallurgy (Cont.)

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## Physical Metallurgy (Cont.)

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- Vanin, V. S., Engineer, and V. K. Titov (Nikolayev). Cementation of Steel in Liquid Organic Media 225
- Bunin, E. P., Corresponding Member of the Academy of Sciences, Ukrainian SSR (Unerprotrotvuk), and A. V. Chernov, Candidate of Technical Sciences (Kiyev). On the Graphite Growth in Cast Iron 229
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- Zubarev, V. P., Doctor of Technical Sciences, Professor, P. K. Yachenko, and I. N. Kudryavtsev (Zhdanov). Formation of Graphitization Centers and Special Features of Their Distribution in the Annealing of Quenched White Cast Iron 258
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## Physical Metallurgy (Cont.)

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L 10402-67 EWT(1) IJP(c) AT  
ACC NR: AT6033036

SOURCE CODE: UR/2504/66/032/000/0060/0079  
21

AUTHOR: Vekslor, V. I.; Gekker, I. R.; Gol'ts, E. Ya.; Kononov, B. I.; Luk'yanchikov,  
G. S.; Rabinovich, M. S.; Sarkyan, K. A.; Serzhevich, Yu. I.; Silin, V. A.; Todor,  
L. E.

ORG: none

TITLE: Radiation acceleration of a plasma

SOURCE: AN SSSR. Fizicheskiy institut. Trudy, v. 32, 1966. Fizika plazmy (Plasma  
physics), 60-79

TOPIC TAGS: plasma acceleration, HF oscillator

ABSTRACT: The article is of the review type (41 literature references) and surveys work done in the field in the Soviet Union, Japan, the United States and France. After a general mathematical introduction to the subject, the authors describe the first experiments on the radiation acceleration of plasmas using superhigh frequency generators. Detailed diagrams are given of two such systems. Detailed consideration is given to the investigation of the special characteristics of the interaction of superhigh frequency oscillations in a plasma, including the effect of plasma resonance, and the acceleration of a plasma by the action of the gradient of a superhigh frequency field. The two final sections deal respectively with the acceleration of a plasma in

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ACC NR: AT6033036

a longitudinal magnetic field, and the injection of pure hydrogen plasma clusters of small size. Orig. art. has: 15 formulas and 17 figures.

SUB CODE: 20/ SUBM DATE: none/ ORIG REF: 026/ OTH REF: 015

Card 2/2

L 42154-65 EEC-4/EWA(h)/EWT(1) PI-4/PJ-4/Pm-4/Pac-4/Peb  
ACCESSION NR: AP5010110 UR/0109/65/010/004/0756/0759 4/

AUTHOR: Gekker, I. R.; Kerzhentseva, N. P.; Luk'yanchikov, G. S.; Sergeychev, K. F.

TITLE: Investigation of a corrugated converter of TE<sub>01</sub> waves into TM<sub>11</sub> waves in a circular waveguide 25

SOURCE: Radiotekhnika i elektronika, v. 10, no. 4, 1965, 756-759

TOPIC TAGS: corrugated converter, TE<sub>01</sub> wave, TM<sub>11</sub> wave, waveguide converter, circular waveguide, circular polarization

ABSTRACT: A corrugated converter of TE<sub>01</sub> waves to TM<sub>11</sub> waves with circular polarization for use in plasma accelerators was studied. The converter is a circular waveguide with ring-shaped slots in the walls. The slot depth d varies uniformly along the length of the converter from  $d = \lambda/2$  to  $d = 0$ . The period of the structure was small in comparison with the operating wavelength ( $\lambda = 10$  cm). Two corrugated converters of different length (1000 mm and 400 mm) were used in the study. The wave purity was analyzed by measuring the relative content of TE<sub>11</sub> and TM<sub>11</sub> waves at the converter output. The

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O  
dependence of both the purity of the TM<sub>11</sub> wave and the standing wave ratio on the frequency in the 2900—3500 Mc range was analyzed for the shorter converter. The purity of the TM<sub>11</sub> wave was 80—90% for the entire frequency range, and SWR did not exceed 1.5. The distribution of electrical field components of the TM<sub>11</sub> wave along the waveguide diameter was measured at a frequency of 3310 Mc at the converter output. These electrical field characteristics agreed with the theoretical data. When a TE<sub>01</sub> wave was passed through the converter, the frequency dependence of its SWR was irregular. Under atmospheric conditions, the converter withstands an sif-pulse power in excess of 1.5 mw. Orig. art. has: 5 figures. [JR]

ASSOCIATION: none

SUBMITTED: 18Apr64

NO REF Sov: 006

ENCL: 00

SUB CODE: EC

OTHER: 000

ATD PRESS: 3239

Card 2/2 CC

L 23868-65 EWT(1)/EWG(k)/EPA(sp)-2/EPA(w)-2/EEC(t)/T/EEC(b)-2/EWA(m)-2  
Pz-6/Po-4/Pab-10/Pl-4 IJP(e) DM/AT

SC  
S/0089/65/018/001/0014/0018 B

ACCESSION NR: AP5003998

AUTHOR: Vokslor, V. I.; Gekker, I. R.; Gol'ts, E. Ya; Dolone, G. A.; Konomov, B. P.;  
Kudrevatova, O. V.; Luk'yanchikov, G. S.; Rabinovich, M. S.; Savchenko, M. M.; Sorkin,  
K. A.; Sergoychey, K. F.; Silin, V. A.; Tsopp, L. E.

TITLE: Interaction of plasma bunches with an electromagnetic wave

SOURCE: Atomnaya energiya, v. 18, no. 1, 1965, N-18

TOPIC TAGS: plasma clot, plasma clot acceleration, plasma clot  
radiative acceleration, H sub 01 wave, H sub 11 wave

ABSTRACT: Preliminary experimental results are given of an investigation of the radiative acceleration of plasma in circular waveguides. The investigation was conducted in a 10-cm range with H<sub>01</sub> and H<sub>11</sub> waves. Different plasma injectors were used. Plasma bunches with an initial particle concentration of 10<sup>12</sup> cm<sup>-3</sup> and higher were injected with a 5 x 10<sup>6</sup> cm/sec velocity from a spark source or were generated directly on the axis of the waveguide by means of a plasma source at a pressure drop of 10<sup>-7</sup>—10<sup>-6</sup> mm Hg of the operating vacuum in an accelerator. Electric detectors, superhigh-frequency methods, and an electrostatic analyzer of particle energy were used for the investigation.

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ACCESSION NR: AP5003998

tion. External magnetic fields with various configurations were used to confine the plasma. Accelerated ions with energies exceeding 10 kev were obtained regardless of the type of wave in the waveguide or the kind of plasma injector. The energy of the accelerated ions increased as the superhigh-frequency power increased. The total number of accelerated particles was of the order of  $10^{12}$ . Maximum energy was 50 kev. The application of nonhomogeneous fields for the stabilization of the transverse dimensions of plasma bunches was shown to be feasible. There were practically no plasma losses on the waveguide walls when quadrupole or sextupole magnetic fields were used. Orig. art. has: 7 figures. [JA]

ASSOCIATION: none

SUBMITTED: 22Apr64 ENCL: 00 SUB CODE: ME,EM

NO REF SOV: 008 OTHER: 001 ATD PRESS: 3178

Cord 2/2

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001548030002-8

GEKKER, I.R.; LUK'YANCHIKOV, G.S.; SERGEYCHEV, K.F.

Matched slot exciter of  $H_{01}$  and  $E_{11}$  waves in a round waveguide.  
Radiotekhnika elektron. 10 no.6:1138-1139 Je '65.  
(MIRA 18:6)

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001548030002-8"

L 40927-65 EPF(n)-2/EPA(w)-2/EWT(l)/EWG(m) PI-4/Po-4/Pz-6/Pab-10 IJP(c) AT/  
WW

ACCESSION NR: AP5007313

S/0057/65/035/003/0577/0580

55  
49

AUTHOR: Gekker, I.R.; Konstantinova, T.G.; Luk'yanchikov, O.S.; Sergeychev, K.F.

TITLE: Experimental investigation of the acceleration of plasma by the action of a  
uhf field gradient

21

SOURCE: Zhurnal tehnicheskoy fiziki, v.35, no.3, 1965, 577-580

TOPIC TAGS: plasma acceleration, hydrogen plasma, microwave field

ABSTRACT: The acceleration of hydrogen plasma by a highly nonuniform uhf field was investigated. Plasma from a mica spark plasma gun was projected into the open end of a circular waveguide excited by pulsed uhf power at a frequency below its cutoff frequency. The dimensions (and cutoff frequency) of this waveguide are not given; the exciting frequency was 3000 Mc/sec. The energy distribution of the ions in the plasma ejected from the waveguide by the action of the exponentially decreasing uhf field was determined with a three-electrode probe. The observed energy distributions were bimodal. When the maximum uhf field strength was 4 KV/cm, ions with energies up to 580 eV were present. It is pointed out that acceleration of plasma by a uhf field gradient is most efficient when the frequency of the field is close to the

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ACCESSION NR: AP5007313

Langmuir frequency of the plasma, and it is concluded that by using uhf fields of the order of 100 kV/cm and plasma densities near the resonance value one should be able to obtain high densities of plasma ions with energies of hundreds of keV. "The authors express their gratitude to Professor M.S.Rabinovich, G.A.Askaryan, and V.V.Yankov for valuable advice, and to E.Ya.Gol'ts, I.A.Delone and M.S.Savchenko for assistance with the work and discussions of the results." Orig.art.has: 2 formulas and 3 figures.

ASSOCIATION: none

SUBMITTED: 06Jun64

ENCL: 00

SUB CODE: ME

REF ID: 008

OTHER: 004

Card 2/2 mB

TITLE: Radiational acceleration of plasma 21.44.55

SOURCE: International Conference on High Energy Accelerators. Dubna, 1963.  
Trudy. Moscow, Atomizdat, 1964, 1017-1022

TOPIC TAGS: high energy accelerator, plasma acceleration, plasma waveguide

**ABSTRACT:** The practical realization of the radiational method of plasma acceleration (Veksler, V. I. CERN Symposium, 1956; *Atomnaya energiya* 2, 427, 1957) is connected with the utilization of a different kind of waveguide structure, within which a plasma bunch moves under acceleration by an electromagnetic field. Two such waveguide structures, differing in type of accelerating wave and in method of plasma injection, were produced recently in the Physics Institute, AN SSSR. Initial experiments showed that radiational acceleration of plasma was achieved in both of the structures. At the same time the Radiotechnical Institute, AN SSSR,

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ACCESSION NR: AT5007972

carried out a theoretical study of the possibilities of the radiational method. The present report contains a brief exposition of all these investigations, under the two headings of: experimental results and theory of radiational acceleration. Both waveguide structures employed one and the same super high-frequency oscillator of 10 cm range which operated in the single-stage pulse regime of 8 microseconds duration; the average density of power flux through tube cross-section did not exceed  $8 \cdot 10^3$  watts/cm<sup>2</sup>, and the KSVN of the entire waveguide system (without plasma) was not worse than 1.3. The accelerating waveguides were tubes of circular cross-section with walls of noncorroding steel 1 mm thick; the vacuum in the tubes was of the order of  $10^{-7}$  to  $10^{-6}$  mm of mercury. The forces of the radiational pressure which act upon the plasma bunch are found by proceeding from the conservation laws. In the plane electromagnetic wave propagated in free space the density of pulse flux equals the average energy density. Orig. art. has: 7 figures, 26 formulas.

ASSOCIATION: Fizicheskiy institut imeni P. N. Lebedeva AN SSSR (Physics Institute, AN SSSR); Radiotekhnicheskiy institut AN SSSR (Radio Engineering Institute, AN SSSR) 44,  
SUBMITTED: 26 May 64 ENCL: 00 SUB CODE: NP  
NO REF Sov: 008 OTHER: 003

DVK  
Card 2/2

SERGEYCHEV, N. F.

"Using Molten Metal to Bind Together Individual Beams Obtained by Casting," Vest.  
"Using Molten Metal to Bind Together Individual Beams Obtained by Casting," Vest.  
Mashinostroy., No. 8, 1948, Engr.

SERGEYCHEV, N. F.

SERGEYCHEV, N. F. -- "SHRINKAGE POROSITY IN ALUMINUM ALLOY CASTINGS WHEN CAST IN METAL MOLDS."  
SUB 31 MAR 52, MOSCOW ORDER OF LABOR RED BANNER HIGHER TECHNICAL SCHOOL (MENDEL'BAUMAN  
(DISSERTATION FOR THE DEGREE OF CANDIDATE IN TECHNICAL SCIENCES)

SO: VECHERNAYA MOSKVA, JANUARY-DECEMBER 1952

SERGEYCHEV, N.E., dots., kand.tekhn.nauk

Placing cores in molds and setting tolerances for pattern.  
Izv.vys.ucheb.zav.; mashinostr. no.7/8:174-179 '58.  
(MIRA 12:8)

1. Altayskiy institut sel'khozmashinostroyeniye.  
(Molding (Founding))

SERGEYCHEV, N.F.

Factors determining the amount of molding incline for patterns.  
(MIRA 12:1)  
Lit. proizv. no.1:8 Ja '59;  
(Founding)

ACC NR: AT6033659

SOURCE CODE: UR/0000/66/000/000/0407/0418

AUTHOR: Yasnopol'skiy, N. L.; Sergeycheva, L. N.; Indrishenok, V. I.

ORG: none

TITLE: Study of currents in thi film dielectrics by an electron contact method

SOURCE: Voprosy plenochnoy elektroniki (Problems in thin film electronics); sbornik statey. Moscow, Izd-vo Sovetskoye radio, 1966, 407-418

TOPIC TAGS: microelectronic thin film, dielectric layer, dielectrics, electron conductivity

ABSTRACT: The conductivity characteristics of a thin film  $\alpha\text{-Al}_2\text{O}_3$  dielectric were recorded. The film was vacuum-deposited on a tantalum substrate to a depth of  $0.8 \mu$  and was probed with 1-kev electron beam varying between  $10^{-8}$  and  $10^{-3}$  amp/cm $^2$  in intensity. Volt-ampere characteristics were obtained for both polarities of d-c voltage applied across the sample. A marked unidirectional conductivity was noted; it was determined that the injected carriers were electrons. Orig. art. has: 6 figures.

SUB CODE: 40/ SUBM DATE: 27Jun66/ ORIG REF: 006

Card 1/1

UDC: 539.216.2:537.525.92

SENGEYCHIK, V.A.

Geography evening in the school. Geog. v shkole no. 4:68-71 Jl-Ag '53.  
(MLRA 6:6)  
(Geography - Study and teaching)

SERGEYCHIK, V.A.

Excursions as part of the elementary course in physical geography.  
Geog.v shkole 20 no.4:45-48 Jl-Ag '57. (MIRA 10:7)  
(Physical geography--Study and teaching) (School excursions)

SERGEYCHIK, V.A. (g. Stalinsk, Kemerovskoy oblasti)

Geographical journals. Geog. v shkole 23 no.5:60-61 S - 0  
'60. (MIRA 13:9)

(Stalinsk (Kemerovo Province) - College and school periodicals)  
(Geography--Study and teaching)

SERGEYCHUK, A.G., inzh.; OKSANICH, I.F., inzh.

Seismic effect in blasting high benches. Vzryv. delo no.57/14:  
225-228 '65. (MIRA 18:11)

1. Nauchno-issledovatel'skiy gornorudnyy institut (for Sergeychuk).
2. Yuzhnnyy gornoobogatitel'nyy kombinat (for Oksanich).

SERGEYCHUK, I.

Modern radio engineering. Radio no. 4:5-7 Ap '55  
(MIRA 8:6)

1. Zamestitel' ministra svyazi SSSR.  
(Radio) (Television)

SERGEYCHUK, K.Ya., redaktor; BAYEV, N.A., redaktor; NAUMOV, P.A., redaktor;  
BELIKOV, B.S., redaktor; VEYNTRAUB, L.B., tekhnicheskij redaktor.

[Engineers' and mechanics' manual of electric communications]  
Inzhenerno-tekhnicheskii spravochnik po elektrosviazi. Moskva,  
Gos. izd-vo lit-ry po voprosam sviazi i radio. Vol.5 [Telegraphy]  
Telegrafiia. 1946. 251 p. (MLRA 9:6)

1. Russia (1923- U.S.S.R) Ministerstvo svyazi.  
(Telegraph)

SERGEYCHUK, K. FA.

K novym dostizheniiam sovetskoi radiotekhniki. Towards new achievements of Soviet radio engineering. (Vestnik sviazzi. Eletrosviaz. 1947, no. 5, p. 1-2).  
DLC: TK4 V45

SO: Soviet Transportation and Communication, Bibliography, Library of Congress Reference Department, Washington, 1952, Unclassified.

Y Y  
SERGEICHUK, K. IA.

Razvitiye sredstv sviazi v novoi stalinskoi piatiletke. The development of communication facilities in the new Stalin five-year plan. (Vestnik sviazi. Pochta. 1946, no. 4, p. 1-3). DLC: HE7.V44

Sviaz' strany sotsializma. Communications of the socialist country. (Vestnik sviazi. Elektrosviaz', 1947, no. 11, p. 1-3). DLC: TK4.V45

SO: SOVIET TRANSPORTATION AND COMMUNICATIONS, A BIBLIOGRAPHY, Library of Congress Reference Department, Washington, 1952, Unclassified.

SERGEYCHUK, K. YA.

PA 1T14

USSR/Radio Technology  
Communications - Personnel

May 1947

"On the New Achievements of Soviet Radio-technology,"  
K Ya Sergeychuk, 2 pp

"Vestnik Svyazi" Vol 7, No 86

Very general discussion contains references to  
personnel and institutions.

1T14

SERGEYCHUK, K. YA.

PA 41T13

USSR/Communications  
Telephones  
Radio Stations

Jan 1948

"Tasks for Soviet Communicators for the Decisive Year of the Postwar Five-Year Plan," K. Ya. Sergeychuk, Minister of Communications, USSR, 3 pp

"Vest Svjazi, Elektro-Svyaz" No 1 (94)

Recapitulates work accomplished in the Soviet Union, in the field of communications, during the first year of the postwar Five-Year Plan. Mentions several decrees affecting development of various branches in this field. Some 67 metropolitan telephone systems overhauled, of which 33 changed to automatic.

LC

41T13

USSR/Communications (Contd)

Jan 1948

telephone networks. Overhauled and established 725 radio centers and installed some 700,000 new radio points. Of this number 150,000 radio points were set up in agricultural communities. Most of the production figures are given in percentages. Lists various cities and towns benefiting most from the advances in communications.

LC

41T13

SERGEYCHUK, K. Ya. and LYUBIMOV, K. A. and UKSTIN, E. F.

"On the Problem of Using New Types of Intercity Communications Cables,"  
Vest. Svyazi, No.7, pp 3-5, 1953

Cand. Tech. Sci.

Translation No.543, 27 Apr 56

SERGEYCHUK, Konstantin Yakovlevich, kandidat tekhnicheskikh nauk;  
YAROTSKIY, A.V., redaktor; ISLANKINA, T.V., redaktor;  
DMITRIYEVA, R.V., tekhnicheskiy redaktor.

[Development of telecommunication technology in the U.S.S.R.]  
Razvitiye tekhniki sviazi v SSSR. Moskva, Izd-vo "Znanie," 1955. 31 p.  
(Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh  
i nauchnykh znanii. Ser.4, no.26) (MLRA 8:9)  
(Telecommunication)

SERGEYCHUK, K.

USSR/ Electronics

Card 1/1      Pub. 89 - 4/28

Authors : Sergeychuk, K.

Title : Contemporary radio engineering

Periodical : Radio 4, 5-7, Apr 1955

Abstract : An article is presented on the occasion of the 60th anniversary of the discovery of radio by A. S. Popov, dealing in the history and recent developments in the field of radio communication, radio broadcasting and televising.

Institution : .....

Submitted : .....

AID P - 493<sup>4</sup>

Subject : USSR/Electronics

Card 1/2 Pub. 89 - 1/18

Author : Sergeychuk, K., Kand. Tech.Sci.

Title : We must liquidate the lag in broadcasting and television engineering.

Periodical : Radio, 8, 1-3, Ag 1956

Abstract : The author claims that despite the acceptance of a large-scale program of development in the field of radio and television engineering for the Sixth Five Year Plan, insufficient efforts in many branches of that industry to fulfill this program are visible. The main causes of that lag can be traced to the lack of sufficient research and design in vacuum tubes, semiconductor devices, new magnetic materials and small-size components. The problem of creating UHF communication and broadcasting was raised already at the XIX congress of the Communist Party. However, the new ultrashort wave radio station developed by

SERGEYCHUK, K.Ya.

Communications in the land of socialism. Vest. sciazi 7 no.11:  
(MLRA 9:1)  
1-3 N '55.

1. Ministr svyazi SSSR.  
(Telecommunication)

GRODNEV, I.I., doktor tekhnicheskikh nauk; SERGEYCHUK, K.Ya., kandidat  
tekhnicheskikh nauk.

Electric losses in the screens of communication cables. Elektrosviaz'  
10 no.2:41-49 F '56. (MLRA 9:6)  
(Telephone cables)

SERGEYCHUK, K. Ya.

AUTHOR: None given

SCOV/111-58-2-6/27

TITLE: The Conference on the Elaboration of the Prospective Plan for the Development of Communication Facilities, Broadcasting and Television (Soveshchaniya po razrabotke perspektivnogo plana razvitiya sredstv svyazi, radioveshchaniya i televi-deniya)

PERIODICAL: Vestnik svyazi, 1958, Nr 2, pp 3 - 6 (USSR)

ABSTRACT: The prospective plan for the development of communication facilities, broadcasting and television was the subject of a conference held in Moscow from 6 to 10 January 1958. The conference was attended by the ministers of communications of the USSR, the Union republics and representatives of various scientific research institutes. Five sub-sections were organized in which the conference participants discussed individual problems. The USSR Deputy Minister of Communications, K.Ya. Sergeychuk, gave a speech on "The Prospects for Developing the All-State Means of Communications, Broadcasting and Television During the Period from 1959 to 1965". Sergeychuk pointed out that the further expansion of the long-distance telephone network is the basic task connected with the introduction of new modern telephone equipment and the modernization of existing facilities. In

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SOV/111-58-2-6/27

The Conference on the Elaboration of the Prospective Plan for the Development of Communication Facilities, Broadcasting and Television

the future it is planned to develop new types of communication systems which will permit a better utilization of the radio frequency spectrum. His speech was followed by a discussion in which the ministers of communications of the different Union republics participated. I.T. Kirichenko, from the Ukrainian SSR; A.V. Cherenkov, from the RFSFR; A.A. Noskov, from the Kazakh SSR; O.Kt. Rupskiy, from the Estonian SSR; A.Kh. Khomenko, from the Moldavian SSR; A.F. Aleksandrov, from the Latvian SSR; N.M. Belyanin, from the Lithuanian SSR; M.A. Sharkov, from the Uzbek SSR; P.V. Afanas'yev, from the Belorussian SSR; T.S. Minasyants, from the Armenian SSR; G.A. Khristesashvili, from the Georgian SSR; V.A. Sayko, from the Tadzhik SSR; A.G. Toropkin, from the Kirgiz SSR; V.G. Krapotukhin, from the Turkman SSR; T.K. Guseynov, from the Azerbaijdzhan SSR. The ministers outlined the work in their republics and pointed out the existing difficulties. Further, M.I. Gladkiy, Deputy Director of the TsNIIS, B.F. Anosovich, Director of TsNIIS, and the Deputy Director of the NII of the USSR Ministry of Communications,

Card 2/3

SOV/111-58-2-6/27

The Conference on the Elaboration of the Prospective Plan for the Development of Communication Facilities, Broadcasting and Television

L.A. Kopytin, presented their views on the future development of communications. The discussion was followed by a speech of the USSR Minister of Communications, N.D. Psurtsev, who summarized the results of the conference pointing out the lines of future development and the difficulties encountered in carrying out existing plans.

Card 3/3

(0)

## PHASE I BOOK EXPLOITATION

SOV/2420

Sergeychuk, Konstantin Yakovlevich, Candidate of Technical Sciences

Tekhnicheskiy progress sredstv svyazi v semiletke (Technical Progress in Communication Facilities in the Seven-Year Plan) Moscow, Izd-vo "Znaniye," 1959. 30 p. (Series: Vsesoyuznoye obshchestvo po rasprostraneniyu politicheskikh i nauchnykh znanii. Seriya IV, 1959, no. 15) 58,000 copies printed.

Sponsoring Agency: Vsesoyuznoye obshchestvo po rasprostraneniyu politicheskikh i nauchnykh znanii.

Ed.: T.F. Islankina; Tech. Ed.: L.Ye. Atroshchenko.

PURPOSE: This booklet is intended for the general reader.

COVERAGE: The booklet contains a public lecture delivered for the Vsesoyuznoye obshchestvo po rasprostraneniyu politicheskikh i nauchnykh znanii (All-Union Society for the Propagation of Political and Scientific Knowledge) in Moscow, February 9, 1959. The author discusses the present state of

Card 1/3

Technical Progress in Communication (Cont.)

SOV/2420

Mechanization and Automatization of Industrial Processes is the Basic Direction in the Development of Communications	25
New Scientific and Technical Problems	29
Bibliography	32

AVAILABLE: Library of Congress

JP/mg  
11-25-59

Card 3/3

SOV/111-59-10-19/23

For Improvement of Postal Communications Work in Azerbaijan

center, and the mobile network is developing slowly; more than 25% of communications sections do not handle money orders, and not all sections handle packages; about 30% of rural communications are not telephone equipped. M.P. Nachinkin, senior inspector of GUPS, noted further shortcomings in the work of communications enterprises in Azerbaijan. I.A. Lamm, chief engineer of GUPS, reported that the Azerbaijan Ministry of Communications is devoting insufficient attention to mechanization of postal processes. K.Ya. Sergeychuk, deputy minister of communications of the USSR, criticized the conduct of the work of the inter-rayon inspectors in Azerbaijan. N.D. Psurtsev, minister of communications of the USSR, spoke of the exceptional importance of further improving postal communications service. The Board adopted a resolution outlining measures for improvement of postal communications work in the Azerbaijan republic; it is proposed to expand the network of postal enterprises, and, in the coming 3 years, telephonize all sections; the necessity for mechanization of postal processes was also noted;

Card 2/3

SOV/111-59-10-19/23

For Improvement of Postal Communications Work in Azerbaijan

and it is stated that a production laboratory must be established at the Baku post office to study mechanization.

Card 3/3

PHASE I BOOK EXPLOITATION

SOV/4822

Grodnev, I.I., and K. Ya. Sergeychuk

Ekranirovaniye apparatury i kabeley svyazi (Shielding of Communication Apparatus and Cables) Moscow, Svyaz'izdat, 1960. 315 p. 6,000 copies printed.

Resp. Ed.: V.M. Lavrov; Tech. Ed.: S.F. Karabilova; Ed.: V. Ye. Petrova.

PURPOSE: This book is intended for technical personnel concerned with the development and operation of means of communications and radio engineering. It may also be used as a textbook by students in advanced related courses.

COVERAGE: The book presents the shielding theory and its application in the protection of h-f communication apparatus and cables from interference. The principles of shielding by means of flat, cylindrical, and spherical shields of single or multilayer design are reviewed and the required basic shielding parameters are established for a wide-frequency spectrum. The effect of the shield on intrinsic transmission parameters and the influence of shielded components and circuits are discussed; a description is included of a mathematical apparatus for the computation of electrical losses in shields. The shielding

Card 1/6

GRODNEV, Igor' Izmaylovich; KULESHOV, Vasiliy Nikolayevich; SOKOLOV,  
Vasiliy Vasil'yevich [deceased]; SERGEYCHUK, K.Ya., kand.tekhn.  
nauk, red.; BALAKIREV, A.F., red.; SHAFER, G.I., tekhn.red.

[Cable communication lines] Kabel'nye linii sviazi. Pod red.  
K.IA.Sergeichuka. Moskva, Gos.izd-vo lit-ry po voprosam sviazi  
i radio, 1960. 494 p. (MIRA 13:7)  
(Electric cables)

VISHNEVSKIY, A.A., doktor ekonom. nauk, prof.; PODGORODETSKIY, I.A., prof.;  
SERGEYCHUK, K.Ye., kand. tekhn. nauk; SOLOVEYCHIK, L.M., kand.  
ekonom. nauk; TUCHIL'NIKOV, G.W., kand. ekonom. nauk; SHETIN, P.A.,  
prepodavatel'; TRIFONOV, V.I., red.; ROMANOVA, S.F., tekhn. red.

[Economics of the communication system] Ekonomika sviazi. Moskva,  
Gos. izd-vo lit-ry po voprosam sviazi i radio, 1961. 279 p.  
(MIRA 14:8)

(Communication and traffic)

GRODNEV, I.I.; GUMELYA, A.N.; KLIMOV, M.A.; SERGEYCHUK, K.Ya.;  
SHVARTSMAN, V.O.; GRIGOR'IEV, B.S., red.; POMUSHENKO,  
A.D., red.; BOGACHEVA, G.V., red.; SHEFER, G.I.,  
tekhn.red.

[Electrical communications engineering handbook; cable and  
overhead communications lines] Inzhenerno-tehnicheskii  
spravochnik po elektrosviazi; kabel'nye i vozдушные линии  
связи. Москва, Гос.изд-во лит-ры по вопросам связи и радио,  
1961, 558 p. (MIRA 14:3)  
(Telephone lines)

BOVKUN, Viktor Georgiyevich; KAZARINOV, Ivan Alekseyevich; KOKOSHKIN, Pavel Aleksandrovich; LYUBSKIY, Gennadiy Severianovich; MEDOVAR, Anatoliy Isayevich; PETROV, Viktor Vasil'yevich; PIONTKOVSKIY, Bronislav Aleksandrovich; SERYAKOV, Nikolay Ivanovich; ELINSON, Mikhail Mikhaylovich; SERGEYCHUK, K.Ya., red.; GRIGOR'YEV, B.S., red.; FORTUSHENKO, A.D., red.; BUSANKINA, N.G., red.; SHEFER, G.I., tekhn. red.

[Engineering manual on electric communications; electric equipment] Inzhenerno-tehnicheskii spravochnik po elektroustanovki. Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio, 1962. 671 p. (MIRA 15:6)

(Telecommunication--Handbooks, manuals, etc.)  
(Electric engineering--Handbooks, manuals, etc.)

S/044/62/000/006/097/127  
B166/B112

AUTHOR: Sergeychuk, K. Ya.

TITLE: Problems of communications and cybernetics

PERIODICAL: Referativnyy zhurnal. Matematika, no. 6, 1962, 44, abstract  
6V213 (Sb. "Kibernetiku - na sluzhbu kommunizmu. v. I."  
M. - L. Gosenergoizdat, 1961, 94-106)

TEXT: Two sections of the work concern the problems of communications engineering in a Communist society. The third contains a popular review of well-known achievements of the theory of mass service and of the reliability theory. Methods of quantizing the signal for reducing the working frequency range by committing redundant information during transmission are described, as well as methods of increasing the rate of time transmission by means of optimum noiseproof coding which withstands transmitting interference. [Abstracter's note: Complete translation.]

Card 1/1

ACC NR: AP6000969

SOURCE CODE: UR/0107/66/000/012/0008/0009

AUTHOR: Sergeychuk, K. (First deputy)

ORG: Ministry of Communication of the SSSR (Ministerstvo svyazi SSSR)

TITLE: Communication within computer systems

SOURCE: Radio, no. 12, 1966, 8-9

TOPIC TAGS: data transmission, communication system, COMPUTER CENTER,  
COMMUNICATION CHANNEL

ABSTRACT: Recently, a nation wide switching network of computer centers (YeGSVTs) was created in the USSR. This network connects all the country's computer centers by means of high capacity trunks. The data processing computers operate at high speed (tens and hundreds of thousands of operations per second) and therefore require high-speed equipment for getting data into and out of the computer from remote locations. The teleprinter transmission used recently has a speed of only 50 bauds. Experiments have shown that regular telephone channels provide a 600—2400-baud speed, but this too is relatively slow for computer centers. Specially engineered broad-band channels are needed for the trunks interconnecting all of the country's computer centers. Reliability is the most important factor of the data transmission

Card 1/2

SERGEYCHUK, M., podpolkovnik

Protecting the rifle company in defensive positions against the weapons  
of mass destruction. Voen. vest. 39 no.10:30-34 0 '59.  
(MIRA 13:2)

(Atomic warfare) (Chemical warfare) (Bacterial warfare)

SERGEYCHUK, Mikhail Maksimovich; LYAMIN, P.V., inzh., retsenzent;  
PREDE, V.Yu., inzh., red.; VASIL'YEVA, N.N., tekhn. red.

[Operation, maintenance and repair of shields for grain  
cars] Ekspluatatsiya i remont khlebnykh shchitov. Moskva,  
Transzhalorizdat, 1962. 22 p. (MIRA 15:8)  
(Railroads--Freight cars) (Grain--Transportation)

SERGEYCHUK, S. (Moskva)

Glue for cardboard. Radio no. 94 Supplement 32. 8 '57. (MIRA 10:10)  
(Glue)

SERGEYCHUK, Ye. V.

FUTER, D.S., professor; SERGEYCHUK, Ye.V., doktor

Clinical aspect, pathogenesis and therapy of muscular dystrophies.  
(MIR 7:6)  
Pediatriia no.2:55-60 Mr-Ap '54.

1. Iz kliniki nervnykh bolezney Pediatriceskogo instituta  
RSFSR i detskoj klinicheskoy bol'nitsy (Moskva)  
(PROGRESSIVE MUSCULAR DYSTROPHY, in infant and child,  
\*clin. aspects, pathogen. & ther.

EDEL'SHTEYN, E.A.; SERGEYCHUK, Ye.V.

Clinical and therapeutic aspects of progressive muscular dystrophies in children. Zhur. nevr. i psikh. 63 no.7:974-978 '63.  
(MIRA 17:7)

1. Detskaya klinicheskaya bol'nitsa No.1 (glavnnyy vrach Ye.V. Prokhorovich, nauchnyy rukovoditel' prof. D.S. Futer).

SERGEY CHEV, N.I.

KISHCHENKO, T.I., inzhener; SERGEICHEV, N.I., inzhener.

Experience of outstanding skidding operators of the Karelo-Finnish S.S.R. Les.prom. 14 no.7:21-22 Jl '54. (MLRA 7:7)  
(Lumbering)

SERGEYENKO, A.A.

Moscow scientific conference of the Academy of Pedagogical Sciences  
and the Moscow City Department of Public Education. Khim. v shkole  
13 no.3:76-79 My-Je '58. (MIRA 11:5)  
(Education--Congresses)

## AUTHORS:

Rogovin, Z. A., Zazulina, Z. A.,  
Mratsinkovskaya, R. N., Sergeyenko, D. I.

SOV/64-58-5-2/21

## TITLE:

The Production of the Polymethacrylonitrile - Fiber and the  
Investigation of Its Properties (Polucheniye volokna iz  
polimetakrilonitrila i issledovaniye yego svoystv)

## PERIODICAL:

*Khimicheskaya promyshlennost'*, 1958, Nr 5, pp. 267 - 269 (USSR)

## ABSTRACT:

Quite a number of experiments relating to the use of copolymers, which are e.g. soluble in acetone have been carried out, for the polyacrylonitrile-fiber, which is, at present, one of the most common due to its good properties in practical use, on the other hand has the disadvantage that the use of a solvent, dimethylformamide, which is comparatively not easily accessible, is necessary. In this series, the derivative mentioned in the title is investigated in the present paper, in connection with which theoretical problems about the influence exercised by the chemical structure on the properties of the polymer can be solved at the same time. Kern and Fernow (Ref 3), as well as Hunyar, Reichert and Fark (Ref 4) have already carried out experiments with polymethacrylonitrile (PMAN) and polyacrylonitrile (PAN). Acetone and HCN were used as initial raw materials

Card 1/3

The Production of the Polymethacrylonitrile-Fiber  
and the Investigation of Its Properties

SOV/64-58-5-2/21

for PMAN, and the acetonecyanhydrine was dehydrogenized with  $P_2O_5$ , while polymerization was carried out according to the static method.

Working conditions are given by which a product with a molecular weight of 400000-600000 was obtained and the latter was determined by viscometric measuring and the equation developed by Staudinger. In acetone the product was dissolved, on which occasion a strong influence could also be observed to be exercised by the character of the solvent. In comparing the properties of the fiber of PMAN and PAN it was observed that the thermal resistance as well as the chemical of the former is much lower. The light-resistance, the mechanical properties, as well as the modulus of elasticity are also lower with PMAN than with PAN, so that it may be assumed that the substitution of hydrogen by the methyl-group in acrylonitrile leads to a decrease of intermolecular interaction and also to an abrupt change of the properties of the polymer. The fiber obtained is apparently of no practical use. There are 2 tables and 5 references, 3 of which are Soviet.

Card 2/3

The Production of the Polymethacrylonitrile-Fiber  
and the Investigation of Its Properties

SOV/64-56-5-2/21

1. Cyanides--Polymerization    2. Fibers--Properties    3. Hydrogen--Chemical  
reactions    4. Fibers--Applications

Card 3/3

SERGEYEV, E.S., inzh.

Use of gas recirculation for preventing slag formation in  
boilers. Prom. energ. 21 no. 1:23-25 Ja '66  
(MIRA 19:1)

SERGYENKO, F.E., MIKEL'S.N, R.S. and KOLYADITSKAYA, L.S.

"On the problem concerning the method of manufacturing valuable preparations of dry dysenteric bacteriophage on solid culture medium," Zhurnal Mikrobiologiy, 10, pp 3-7, 1946.

From the Central Institute of Epidemiology and Microbiology of the USSR Ministry of Health.

SO: Trans.-544, by L. Lulich.

SERGEYENKO, G.A.

Use of the waste of rotary-cut veneer for the production of  
particle board by the extrusion method. Der. prom. 14 no.8:28  
(MIRA 18:10)  
Ag '65.

1. Gomel'skiy fanerno-spichechnyy kombinat.

SERGEYENKO, G.A.

Improving the quality of casein glue in plywood production. Der.i lesokhim.  
prom. 2 no.11:23-24 N '53. (MLRA 6:11)

(Glue)

1. Gomel'skiy fanerno-spichechnyy kombinat.

SERGEYENKO, G.A., inzhener.

Mechanical feeding of logs to the wood peeling machine. Der.i lesokhim.  
(MLBA 7:1)  
prom. 3 no.2-29 F '54.

1. Gomel'skiy fanerno-spichechnyy kombinat.  
(Woodworking machinery)

SERGEYENKO, I.A.; FORMIN, N.V.

New speedy method for electroplating. Med.prom. no.1:42 Ja-Mr '55.  
(MIRA 8:5)

(NICKELPLATING)

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001548030002-8

TEMCHENKO, I. Ye. (Veterinary Doctor, "Podol'e" Fattening Farm, City of Ternopol')  
and SERGEYENKO, I. F. (Veterinary Doctor, Braginsk District, Gomel' Oblast').

"Removal of obstruction from the esophagus in swine"...

Veterinariya, vol. 39, no. 8, August 1962 pp. 51

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001548030002-8"

USSR / Human and Animal Physiology. Blood Chemistry.

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Abs Jour : Ref Zhur - Biol., No 15, 1958, No. 69991

Author : Vitushinskiy, V. I.; Sergeyenko, I. I.

Inst : Stalingrad Medical Institute

Title : Changes in the Bone Marrow in Dogs Following Massive Hemorrhage with Subsequent Injection of Specific Serum

Orig Pub : Sb. nauchn. rabot teor. i klinich. kafedr. Stalingr. med. in-ta, Stalingrad, 1956, 37-43

Abstract : Five dogs were subjected to loss of blood equal to three to five percent of the body weight. Within 30-60 min the dogs were transfused with specific serum "hemoinfusion" (H) to a volume equal to the amount of blood lost. The bone marrow (BM) was studied prior to and seven to eight days after the injection of the H, while in two surviving dogs, the marrow was studied in 12-15 days. Following transfusion of H, the BM showed an increase in the number

Card 1/2

37

TSUKERMAN, G.Ya. (Stalingrad); SERGEYENKO, I.I. (Stalingrad)

Endovasculitis of an arteriovenous aneurysm and subacute bacterial  
endocarditis. Klin.med. 34 no.5:88-89 My '56. (MIRA 9:10)

1. Iz kafedry gospital'noy terapii (zav. - prof. I.V. Vorob'yev)  
i kafedry patologicheskoy anatomi (zac. - prof. V.I. Vitushinskiy)  
Stalingradskogo meditsinskogo instituta.

(FISTULA, ARTERIOVENOUS,

jugulocarotid with endovasculitis & subacute back.  
endocarditis (Rus))

(ARTERIES, CAROTID, fistula,

arteriovenous jugulocarotid with endovasculitis &  
subacute bact. endocarditis (Rus))

(VEINS, JUGULAR, fistula,

same)

(ENDOCARDITIS, SUBACUTE BACTERIAL, complications,  
jugulocarotid arteriovenous fistula with endovasculitis  
(Rus))

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001548030002-8

YELIN, S.N.; SERGEYENKO, L.A.

Modernizing the industrial equipment at an apatite-nephelite  
mineral dressing plant. Obog. rud. 8 no. 3:45-47 '63.  
(MIRA 17:1)

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001548030002-8"

SERGEYENKO, Mariya Yefimovna; KALLISTOV, D.P., otv. red.; AL'BOVA, G.A.,  
red.izd-va; KRUGLIKOV, N.A., tekhn.red.

[Agriculture of Italy in antiquity] Ocherki po sel'skomu khoziaistvu  
drevnei Italii. Moskva, Izd-vo Akad.nauk SSSR, 1958. 245 p.  
(MIRA 11:12)

(Rome--Agriculture)

ACCESSION NR: AR4020785

S/0271/64/000/002/B044/B045

SOURCE: RZh. Avtomat., telemekh. i vychislitel. tekhnika, Abs. 2B281

AUTHOR: Bukreyev, I. N.; Chavchanidze, V. V.; Manukyan, Yu. S.; Sergeyenko,  
N. D.TITLE: Circuit for distinguishing numbers in modulus in high speed electronic  
accumulators

CITED SOURCE: Tr. In-ta kibernetiki, AN GruzSSR, v. 1, 1963, 105-110

TOPIC TAGS: absolute comparator, accumulator, high-speed accumulator, absolute  
value comparison, computer, comparator circuit absolute valueTRANSLATION: A device is described for comparing the absolute values of two  
numbers A and B without subtraction operations or analysis of the result. The  
operation of the differentiator is based on a known method of comparing the ab-  
solute values when positional notation is used for the numbers. The method is  
roughly stated thus: the number whose left-hand digit is the top digit  
has the greater modulus. In the binary system the algorithm for comparing

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ACCESSION NR: AR4020785

the absolute values of two numbers A and B appears as follows: the identical bits of the numbers A and B are scanned sequentially beginning with the left-hand digit until the bits having different digits are found (10 or 01); the number having 1 in the indicated bit has the greater absolute value. The schematic diagram for realizing this principle is given (see enclosure). Four AND circuits in each bit are controlled by input triggers of the registers containing the numbers A and B. They determine the binary digit combinations 11, 00, 10, and 01. Signals from the AND circuits travel over two paths. When  $|A| < |B|$  a signal appears at the output of the first path; when  $|A| > |B|$  at that of the second. When neither of these signals is present, it means that  $|A| = |B|$ . Use of this number comparison method in accumulators makes it possible to add algebraically without having to convert the numbers into an auxiliary or inverse code. Orig. art. has 2 figs., 1 table, and 5 refs.

G. K.

DATE ACQ: 03Mar64

SUB CODE: AI

ENCL: 01

Card 2/3

SERGEYENKO, S. A. Cand Agr Sci -- (diss) "Cultivation of buckwheat in the Belorussian SSR." Minsk, 1958. 42 pp (Acad Agr Sci Belorussian SSR. Inst of Agriculture), 25 copies (KL, 14-58, 115)

SERGEYENKO, S.R.

SOV/81-59-15-54620

Translation from: Referativnyy zhurnal. Khimiya, 1959, Nr 15, p 421 (USSR)

AUTHORS: Sergeenko, S.R., Davydov, B.E.

TITLE: The Physical Properties of Resinous Substances of Petroleum

PERIODICAL: V sb.: Sostav i svoystva vysokomolekul. chasti nefti. Moscow, AN SSSR, 1957, pp 215 - 257

ABSTRACT: Resinous substances of Gyurgyan (low-sulfurous, low-resinous) and Kurskino (heavy, sulfurous) petroleum have been investigated by the earlier described method for the separation of resinous substances (Zhur. Khim. Nr 15, 1955). The physical-chemical characteristics are cited as well as the molecular-surface properties and the composition of the fractions obtained from both oils by the consecutive treatment with  $\text{CO}_2$ ,  $\text{C}_2\text{H}_4$ , and acetone. The properties of monomolecular layers of resins on the surface of water have been studied by the methods of measuring the horizontal pressure of the monolayer and the spreading of the drop. The dielectric permeability (DP) of the resins of the individual fractions and their solutions in n-heptane have been measured, and the curves of the dependence of DP on the frequency of the electric field, the concentration

Card 1/2

SCW/SL-59-15-5482.

Properties of Petroleum and Related Substances of Petroleum.

and the temperature of the solutions are given. The temperature dependence of the polarization of resins in the range of 7 - 65°C has been studied and the dipole moments of the investigated fractions have been determined. All investigated resins have a high surface activity. Petroleum resins can be separated into fractions with increasing surface activity by solvents with increasing EP. The regularities of the changes in molecular-surface and polarization properties of petroleum resins by fractions are caused by changes in the content of acidic and neutral saponifiable substances in the resins. All studied resins proved to be less surface-active in  $C_2H_6$  solutions and considerably more active in solutions of *cis*-hexane and n-heptane; but the solvents could not change the principal tendency which depends on the chemical nature of the resin. Petroleum resins in concentrated solutions tend to association. The introduction of cyclohexane into the series of solvents which have been proposed earlier for the alteration-chromatographic separation of resins permits to divide the resins into narrower fractions.

S. Rozenfeld

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Card 107

KAZARNOVSKIY, L.S.; LOKHVTISKAYA, M.F.; LYSENKO, L.V.; PIVNENKO, G.P.;  
SERGEYENKO, T.A.; SILA, V.I.; SOTHIKOVA, O.M.; CHUYKO, O.V.

Comparison of methods for preparing and analyzing infusions [with  
summary in English]. Apt.delo 8 no.1:64-71 Ja-F '59.  
(MIRA 12:2)

1. Iz Khar'kovskogo farmatsevticheskogo instituta (dir. - dots.  
Yu.G. Borisyuk) Ministerstva zdravookhraneniya USSR.  
(EXTRACTS)

SUREN'YANTS, Yakov Surenovich, Prinimal uchastiye SERGEYENKO, V.G., inzh.;  
RACHEVSKAYA, M.I., red. izd-va; NAZAROVA, A.S., tekhn. red.

[Water wells] Vodianye skvazhiny. Moskva, Izd-vo M-va kommun. khoz.  
RSFSR, 1961. 317 p. (MIRA 14:10)  
(Wells)

OKUN', S.S., kand.tekhn.nauk; SERGEYENKOV, B.N., inzh.

New designs and circuits of contactless premagnetized controlling  
transformers. Vest. elektroprom. 31 no.11:66-73 N '60.  
(MIRA 13:12)

(Electric transformers)

SERGEYENKO, V. M.

Apple

Ways of overcoming periodicity in the fertility of apple trees. Sad i og., No. 3, 1952

Monthly List of Russian Accessions. Library of Congress. October 1952. UNCLASSIFIED.

SERGEYENKO, V.M.

Plodovodstvo v stepi (Fruit culture in  
the steppes). Simferopol', Krymizdat, 1953. 102 p.

SO: Monthly List of Russian Accessions, Vol. 7, No. 5, August 1954

SERGEYENKO, V.M.

[Ways of putting an end to periodicity of bearing in apple trees]  
Shliakhy likvidatsii periodichnosti plodonoshennia iabluni.  
Simferopol, Krymvydav, 1956. 156 p. (MLRA 10:5)  
(Apple--Diseases and pests)

USSR/Cultivated Plants. Fruit Trees. Small Fruit Plants.

M

Abs Jour: Ref Zhur-Biol., No 17, 1958, 77837.

Author : Sergeyenko, V.M.

Inst :    
Title : Agricultural Engineering of Dwarf and Semi-Dwarf Apple and Pear Trees.

Orig Pub: Vinogradarstvo i sadovodstvo Krymn, 1958, No 2,  
26-28.

Abstract: No abstract.

Card : 1/1

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001548030002-8"

ABSTRACT : Cultivated Plants. Fruits. Berries. Mats. Biol.

M

AB. JOUR. : Ref Biol., No. 17, 1958,

AUTHOR : Sergeyenko, V.M.

INST. :    
TITLE : Conditions for Artificial Fruit Bearing of Apples.

ORG. PUB. : Sad i Ogorod, 1958, No. 4, 48-50

ABSTRACT : No abstract.

CAP04

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