"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

USSR

GORYACHEV, GALINA ANATOL'YEVNA, et al., Deystviye pronikayushchey radiatsii na radiodetali, Moscow, Izd. "Atomizdat," 1971, 120 pp, 32 fig., 35 tab., 52 ref., 71 k.

4.3 Techniques of experimental investigation of radio components using static sources of penetrating radiation 108

Appendix 113

Bibliography 117

4/4

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

USSR

GOL'DINOV, A. L., PANSHIN, Yu. A., ZIL'BERMINTS, G. S., SHAPKIN, L. G., and GALUTSKIY, G. M.

UDC 632.95

"Synthesis of Trichloroacetic Acid"

USSR Author's Certificate No 284781, Filed 11 Jun 69, Published 12 Jun 72 (from Referativnyy Zhurnal -- Khimiya, Svodnyy Tom, (I, L-S), No 1(II), 1973, Abstract No 1N499P by T. A. Belyayeva)

Translation: Trichloroacetic acid is synthesized by oxidation of CCl_3CHO (I) at 45-65°C in the presence of HNO_3 by passing oxygen through the reaction mixture, followed by a final oxidation with HNO_3 at 80-100°C. Example. Synthesis is carried out continuously in a sequence consisting of three glass reactors (Rc). The first Rc is supplied with I, as well as with HNO_3 and O_2 in amounts 0.2-0.5 and 0.4-0.8 mole per 1 mole of I, respectively. In some cases the second RC is also supplied with O_2. The reaction mixture stays in each Rc for 6 hrs. Temperature in the first, second, and third Rc is maintained at 45-65, 80-90, and 90-95°C, respectively. The concentration of HNO_3 is kept at 85-98%, and of I at 83-98%. The yield of CCl_3COOH is 97.5-100%.

1/1

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

018

UNCLASSIFIED

TITLE--SYNTHESIS AND STUDIES OF POLYFERROMONOHALOPHENYLSILOXANES -U-

PROCESSING DATE--27NOV70

AUTHOR-(03)-BYKOV, V.T., AVILOVA, T.P., SHAPKIN, N.P.

COUNTRY OF INFO--USSR

SOURCE--VYSOKOMOL. SOEDIN., SER. A 1970, 12(4), 724-9

DATE PUBLISHED-------70

SUBJECT AREAS--CHEMISTRY

TOPIC TAGS--CHEMICAL SYNTHESIS, SILOXANE, BENZENE DERIVATIVE, HYDROLYSIS, CHEMICAL REACTION KINETICS, BROMINATED ORGANIC COMPOUND, ORGANOIRON COMPOUND, CHLORINATED ORGANIC COMPOUND

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3006/1260

STEP NO--UR/0459/70/012/004/0724/0729

CIRC ACCESSION NO--AP0134934

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

2/2 018

UNCLASSIFIED

CIRC ACCESSION NO--AP0134934 PROCESSING DATE--27NOV70

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT.

POLY(FERRO(MONOCHLOROPHENYL)SILOXANES) (I) AND POLY(FERRO(MONOBROMOPHENYL)SILOXANES) (II) WERE OBTAINED BY A REACTION OF CLC SUB6 H SUB4 SICL SUB3 OR BRC SUB6 H SUB4 SICL SUB3 (IN PHME) WITH NAOH, FECL SUB3, AND ALUM. THE YIELD OF I AND II INCREASED, WHEREAS FE CONTENT AND FRACTIONAL DISTRIBUTION THEREOF DECLINED IN THE COURSE OF THE REACTION. HYDROLYSIS KINETICS OF I AND II SUGGESTED THAT THE CLEAVAGE RATE OF THE SI-O-FE BOND AT THE LIG. LIG. INTERFACE WAS A FUNCTION OF THE DIFFUSION RATE. BOTH I AND II WERE STABLE TO 400-60DEGREES, BUT I EXHIBITED HIGHER HYDROLYTIC STABILITY.

FACILITY: DAL'NEVOST. GOS. UNIV., VLADIVOSTOK, USSR.

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

AA0030270

Soviet Inventions Illustrated, Section II Electrical, Derwent, UR 0482

236806 PHOTO-ELECTRIC CONTROL FOR INDUCTION HEATING

of metals by the proposed method improves control accuracy, reduces waste, and ensures good reproduceability in high-frequency heat-treatment under conditions of random variations in heating rate. The desired temperature process in induction heating is well understood, but the cycle can be distorted by random errors (voltage variations, uneven distribution of heat, etc.) The proposal envisages a temperature sensor combined with a delay element in the form, for example, of an inductive amplifier operating valve and relay circuitry to compare the amplifier output with a reference voltage set to correspond to some chosen temperature. The control is effective for slow heating rates (furnace heating) and with rates proper to induction heating is responsive to some higher temperature, the more rapid the heating, thus compensating for the rate. 6.2.67 as 1131186/18-10.P.I.RUSIN et alia.(1.7.69) Bul 7/3.2.69. Class 42i. Int.Cl.G 01k.

AUTHORS: P.I. Rusin, A.I. Smolyaninov, V.M. Shapkin, V.N. Pustovyt

19690162

18

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

1/2 024 UNCLASSIFIED

TITLE--SELECTION FO THE METHOD AND TECHNIC OF RESECTION OF THE LIVER -U-

PROCESSING DATE--16OCT70

AUTHOR-(02)-SHAPKIN, V.S., ZHURAVLEV, V.A.

COUNTRY OF INFO--USSR

SOURCE--VESTNIK KHIRURGII IMENI I. I. GREKOVA, 1970, VOL 104, NR 4, PP 59-63

DATE PUBLISHED--------70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES

TOPIC TAGS--LIVER, SURGERY, HYPOTHERMIA

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1988/0041

STEP NO--UR/0589/70/104/004/0059/0063

CIRC ACCESSION NO--AP0105140

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

2/2 024

UNCLASSIFIED

CIRC ACCESSION NO--AP0105140 PROCESSING DATE--16OCT70

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. AN ANALYSIS OF 137 HEPATECTOMIES INCLUDING 39 HEMIHEPATECTOMIES AND EXTENSIVE HEMIHEPATECTOMIES, 20 LOBECTOMIES, 41 BISEGMENT AND SEGMENTECTOMIES AND 37 ATYPICAL OPERATIONS IS GIVEN IN THE LIGHT OF SELECTION OF VARIOUS METHODS AND TECHNICS OF RESECTION OF THE LIVER. ONLY EXTREMELY GRAVELY ILL PATIENTS WERE OPERATED UPON UNDER CONDITIONS OF HYPOTHERMIA WITH LIGATION OF THE HEPATIC PEDICLE. THE POSTOPERATIVE MORTALITY WAS 13.1 PERCENT (18 PATIENTS).

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

USSR

UDC 621.52:633.59

ALEKSANDROVA, A.T., GURA, A.N., KULOMZIN, YE.K., SHAPKIN, YE.V.

"Experimental Units For Study Of The Operation Of Mechanisms And Radioelectronic Systems In A Vacuum"

Tr. Mosk. in-ta elektron. mashinostr. (Works Of The Moscow Institute Of Electrical Machine Construction), 1971, No 9, pp 185-190 (from RZh:Elektronika i yeye primeneniye, No 2, Feb 72, Abstract No 2A66)

Translation: Units were developed for simulation of vacuum conditions in the range of vacuums of $10^{-4} \div 10^{-8}$ mm of mercury at temperature from minus 100 to plus 300° C. The means for high-vacuum pumping in the unit are two series-connected diffusion pumps with an output of 2000 and 500 l/sec. A.F.

1/1

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

Acc. Nr: AP0049043

S

Ref. Code: UR0357

PRIMARY SOURCE: Vestnik Oftal'mologii, 1970, Nr 1, PP 13-17

EFFECT OF GLUCOCORTICOIDS ON THE EYE TISSUE MUCOPOLYSACCHARIDES IN RABBITS AND THE STATE OF THE OPHTHALMOTONE REGULATION

B. S. Kasavina, V. M. Pantiyeleva, A. M. Shapkina

Summary

Glucocorticosteroids (cortisone, hydrocortisone) were found to exercise different influence on the content and composition of mucopolysaccharides in the ocular humors and tissues, depending upon the kind, dosage and timing of the hormones administration. The earliest and most pronounced changes are shown to occur in the aqueous

1/2

REEL/FRAME
19800828

2

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

AP0049043

humor, vitreous body, cornea and the crystalline lens. In the ciliary body and sclera modifications are observed to take place after a long-term introduction of the hormones. Deep changes in the trophicity of the eye tissues stemming from protracted administration of steroid hormones are revealed. Such changes in the ciliary body and filtration zone of the anterior chamber angle are attended by shifts in the intraocular pressure. Tests involving long-term introduction of glucosteroids ascertained the presence of direct relationship between the content and composition of mucopolysaccharides, on the one hand, and the hydrodynamics and ophthalmotone regulation, on the other. The present research explains one of the possible causes accounting for complications which supervene after prolonged use of steroid hormones in large doses.

19800829

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

1/2 021 UNCLASSIFIED

TITLE--INJURIES OF THE LIVER IN CHILDREN -U- PROCESSING DATE--16OCT70

AUTHOR-(02)-BAIROV, G.A., SHAPKINA, A.P.

COUNTRY OF INFO--USSR

SOURCE--VESTNIK KHIRURGII IMENI I. I. GREKOVA, 1970, VOL 104, NR 4, PP 102-108

DATE PUBLISHED--------70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES

TOPIC TAGS--PEDIATRICS, LIVER, INJURY, SURGERY

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1988/0048 STEP NO--UR/0589/70/104/004/0102/0108

CIRC ACCESSION NO--AP0105147

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

2/2 021 UNCLASSIFIED

CIRC ACCESSION NO--AP0105147 PROCESSING DATE--16OCT70

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. BASED ON OBSERVATIONS OF 51 YOUNG PATIENTS WITH HEPATIC INJURIES THEIR CLASSIFICATION ACCORDING TO THE CLINICAL PICTURE IS GIVEN, AND SURGICAL POLICY OF TREATMENT IS DISCUSSED.

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

1/2 021 UNCLASSIFIED PROCESSING DATE--30OCT70

TITLE--FLAME SPECTROPHOTOMETRIC MICRODETERMINATION OF TRACES OF LITHIUM, RUBIDIUM, AND CESIUM -U-

AUTHOR-(02)-PRUDNIKOV, YE.D., SHAPKINA, YU.S.

COUNTRY OF INFO--USSR

SOURCE--ZH. ANAL. KHIM. 1970, 25(2), 250-2

DATE PUBLISHED--------70

SUBJECT AREAS--CHEMISTRY

TOPIC TAGS--TRACE ANALYSIS, LITHIUM, RUBIDIUM, CESIUM, FLAME SPECTROSCOPY

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1996/1901 STEP NO--UR/0075/70/025/002/0250/0252

CIRC ACCESSION NO--AP0118863

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

2/2 021 UNCLASSIFIED PROCESSING DATE--30OCT70

CIRC ACCESSION NO--AP0118863

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. METHODS WERE DEVELOPED FOR THE FLAME SPECTROPHOTOMETRIC MICRODETN. OF 5 TIMES 10 PRIME NEGATIVE5PERCENT LI SUB2 O, RB SUB2 O, AND CS SUB2 O FROM 10-MG SAMPLES AND DOWN TO 5 TIMES 10 PRIME NEGATIVE4PERCENT OF LI SUB2 O, RB SUB2 O, AND CS SUB2 O IN 1-G SAMPLES. DECOMP. 1-10-MG SAMPLES IN A MIXT. OF H SUB2 SO SUB4 AND HF (1 DROP 1:1 H SUB2 SO SUB4 AND 1.5-2.0 ML HF), EVAP. TO DRYNESS, AND CALCINE. LEACH THE RESIDUE IN 0.5 ML 1:1 HCL AND 10 ML H SUB2 O, FILTER, AND DIL. TO 50 ML WITH H SUB2 O. DET. LI, RB, AND CS ON A FLAME PHOTOMETER WITH A DIFFRACTION MONOCHROMATOR AND COMPARE WITH SAMPLES CONTG. 0.1-0.0001 MUG LI, RB, AND CS-ML. USE AS BUFFER A SOLN. CONTG. 100 MG NACL AND 25 MG KCL-ML. THE ERROR IS 3-5PERCENT AT A ELEMENT CONCN. OF 0.1-1.0PERCENT, 10-15PERCENT AT A CONCN. OF 0.01-0.001PERCENT AND 20-30PERCENT AT A CONCN. OF 10 PRIME NEGATIVE3-10 PRIME NEGATIVE4PERCENT. FACILITY: LENINGRAD STATE UNIV., LENINGRAD, USSR.

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

UDC 621.771.24

USSR

STARCHENKO, D. I., KAPLANOV, V. I., and SHAPKO, V. M., Zhdanov

"Study of Influence of Conditions of High-Speed Cold Rolling on the Mechanical Properties of Steel"

Moscow, Izvestiya Akademii Nauk SSSR, Metally, No 1, Jan 71, pp 96-100

Abstract: Studies were performed on high-speed cold rolling of steel strips on a type-300 laboratory mill with a roller speed of from 4.5 to 30 m/sec, using various well-known lubricants: type PKS-1, castor oil, and distilled water, as well as three new technological lubricants developed at the Zhdanov Metallurgical Institute. The new lubricants consist of: 10% water emulsion of the product of condensation of C_{17}-C_{20} synthetic fatty acids with triethanolamine, 30% type 20 industrial oil (TPS-17M30); 30% solution of the product of condensation of still residue synthetic fatty acids with triethanolamine in type 20

1/2

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

USSR

STARCHENKO, D. I., et al., Izvestiya Akademii Nauk SSSR, Metally, No 1, Jan 71, pp 96-100

industrial oil (type TPS-K30); and a 50% solution of still residue synthetic fatty acid condensate with triethanolamine in type 20 industrial oil (TPS-K50). The hardness of thin-sheet low-alloy steel under high-speed rolling conditions can be considered to depend on the degree of total deformation, and to be independent of the type of technological lubricant, speed of rollers, and number of passes. Based on the experimental data, formulas are produced for the functional dependence of hardness, yield point, and ultimate strength on degree of deformation, yield point, and ultimate strength on hardness, and also yield point on ultimate strength and ultimate strength on yield point of work-hardened low-alloy steel strip.

2/2

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

5

UDC 621.315.592

USSR

SHAPOCHANSKAYA, Z.V., KONYAYEV, S.I., KLYAUS, Kh.I.

"Capacitive Characteristics of a Thin-Film Switching Element Based on Selenium"

Leningrad, Fizika i Tekhnika Poluprovodnikov, Vol 4, No 5, 1970, pp 822-824

Abstract: Experimental data are presented from a study of the capacitance of a thin-film switching element with a Ag-Se-Al structure as a function of illumination, variable voltage frequency, and fixed bias. The range of light wavelengths causing variation in capacitance of the illuminated specimen is determined. A model of a two-layer capacitor was used to interpret the results obtained. The observed variations in the capacitance can arise from the presence of a photodielectric effect and the presence of traps in the selenium.

The source of illumination used in the experiment was an incandescent lamp with a tungsten filament, and the illumination varied from 0 to 30,000 lux.

1/2

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

USSR

SHAPOCHANSKAYA, Z.V., et al, Fizika i Tekhnika Poluprovodnikov, Vol 4, No 5, 1970, pp 822-824

The sharpest variation in capacitance was caused by a wavelength of 500-750 microns which corresponds to energies of 2.2-1.6 electron volts. It is pointed out that in the investigated Ag-Se-Al structure the selenium layer is an amorphous dielectric in which there can be regions absorbed by silver (possibly, Ag_2Se). This complex dielectric can be represented by an equivalent schematic of a two-layer capacitor. The formula for calculating the resultant capacity of this layer is presented, and its effect is interpreted by this mechanism.

2/2

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

Mechanical Properties

USSR UDC 669.5'71:620.1

GULYAYEV, A. S., PROTASOVA, I. V. and SHAPOCHKIN, A. I.

"Study on the Superplasticity of TsAM 10-5 Alloy"

Moscow, Tsvetnyye metally, No 2, Feb 72, pp 58-60

Abstract: The study on the superplasticity of TsAM 10-5 alloy (5% Cu, 10% Al, up to 0.06% Mg, the balance--zinc) included the effect of the initial structure and the state of the treated alloy on its mechanical properties under static tensile tests within 200-350°C as well as changes in the alloy's microstructure during deformation under conditions of superplasticity. The alloy was tested as hot-extruded, hot-rolled, quenched and aged. In the process of superplastic flow the structure of the alloy appears to be almost identical in all cases and comprises a finely disperse mixture of phases with crystals measuring several microns. The TsAM 10-5 alloy exhibits its maximum tendency to superplasticity when its structure consists of finely disperse phases measuring several microns. An addition of magnesium increases the tensile strength of the alloy following its superplastic flow without affecting the superplasticity temperature interval. (2 illustrations, 1 table, 6 bibliographic references).

1/1

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

USSR

UDC 51

TORGOVITSKIY, I. SH., SHAPOCHNIK, YA. L.

"Some Problems Arising in the Dencentralized Method of Systems Control"

V sb. Detsentralizovan. metody upr. (Decentralized Methods of Control--collection of works), Moscow, 1972, pp 126-133 (from RZh-Kibernetika, No 12, Dec 72, Abstract No 12V379)

No abstract

1/1

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

UNCLASSIFIED PROCESSING DATE--18SEP70

1/2 036

TITLE--RESONANCE CHARGE EXCHANGE IN A HE POS6TIVE AND HE SYSTEM -U-

AUTHOR-(04)-LATYPOV, Z.Z., FEDORENKO, N.V., FLAKS, I.P, SHAPORENKO, A.A.

COUNTRY OF INFO--USSR

SOURCE--PIS'MA ZH. EKSP, TEOR. FIZ. 1970, 11(3), 189-92

DATE PUBLISHED--------70

SUBJECT AREAS--PHYSICS, CHEMISTRY

TOPIC TAGS--ION BOMBAROMENT, HELIUM, ELECTRON RESONANCE, CHARGE EXCHANGE

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1987/0780 STEP NO--UR/0386/70/011/003/0189/0192

CIRC ACCESSION NO--AP0104226

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

2/2 036 UNCLASSIFIED PROCESSING DATE--18SEP70

CIRC ACCESSION NO--AP0104226

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE CROSS SECTION, DELTA, OF THE PROCESS HE POSITIVE PLUS HE YIELDS HE PLUS HE POSITIVE WAS MEASURED AT ENERGIES E EQUALS 150-3200 EV IN THE ASSEMBLY DESCR6BED BT PREVIOUSLY (LATYPOV, ET AL., 1968). FOR THE PROCESS, DELTA EQUALS F(E) IS AN OSCILLATING FUNCTION. THE DIFFERENCE BETWEEN EVEN AND ODD STATES DID NOT PASS THROUGH A MAX. OSCILLATIONS WERE EXPLAINED ON THE ASSUMPTION OF AN EFFECT OF SCATTERING OF PARTICLES IMPINGING ON THE HOST 4F THE ATOM TARGET.

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

1/2 022 UNCLASSIFIED PROCESSING DATE--30OCT70

TITLE--BIOLOGICAL EFFECT OF COMBINED GAMMA AND NEUTRON IRRADIATION IN VARIOUS GAMMA RAYS TO NEUTRON RATIOS -U-

AUTHOR--SHAPOROV, V.N.

COUNTRY OF INFO--USSR

SOURCE--RADIOBIOLOGIYA 1970, 10(1), 150

DATE PUBLISHED--------70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES

TOPIC TAGS--NEUTRON RADIATION, GAMMA RADIATION, RADIATION BIOLOGIC EFFECT

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3001/1841 STEP NO--UR/0205/70/010/001/0150/0150

CIRC ACCESSION NO--AP0127251

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

2/2 022 UNCLASSIFIED PROCESSING DATE--30OCT70

CIRC ACCESSICN NO--AP0127251

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE BIOL. EFFECT OF COMBINED GAMMA AND NEUTRCN IRRADN. DEPENDED ON THE TOTAL DOSE OF GAMMA RAYS, AND THE RATIO OF GAMMA RAYS TO NEUTRON RAYS. FACILITY: INST. BIOFIZ., MOSCCW, MOSCCW, USSR.

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

Microelectronics

USSR UDC 621.382.002

ZAVAL'SKIY, Yu. P., NIKISHIN, V. I., PETROV, L. N., SHAPOSHNIK, K. I.

"A Method of Making Integrated Circuits"

Moscow, Otkrytiya, izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, No 15, May 71, Author's Certificate No 302771, Division H, filed 10 Nov 69, published 28 Apr 71, p 188

Translation: This Author's Certificate introduces a method of making integrated circuits including the operations of producing a heavily doped N+ silicon layer with conductivity type opposite to that of the initial material followed by epitaxial deposition of a high-resistance layer of silicon of the same conductivity type as the heavily doped layer directly on the surface of the heavily doped layer. As a distinguishing feature of the patent, the packing density of the integrated circuits on the plate is increased, and the electrical and operational characteristics of the integrated circuits are improved by creating the N+ layer on the surface of depressions selectively etched in P-silicon, after which the depressions are epitaxially filled with N-silicon in the presence of silicon oxide on the P-silicon surface.

1/1

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

USSR UDC: 621.396.6-˘8˘.5

UGAY, Ya. A., ZAVAL'SKIY, Yu. P., SHAPOSHNIK, K. I.

"The Problem of Gas Etching the Surface of Semiconductor Materials in Microelectronics"

Elektron. tekhnika. Nauchno-tekhn. sb. Upr. kachestvom i standartiz. (Electronic Technology. Scientific and Technical Collection. Quality Control and Standardization), 1970, vyp. 4, pp 50-57 (from RZh-Radiotekhnika, No 12, Dec 70, Abstract No 12V188)

Translation: The authors discuss the timeliness of gas etching as a method of preparing the surface of semiconductor plates in the planar and epitaxial processes. A survey is given of methods of gas etching with the use of halogens, hydrogen halides and water vapor. Conditions are discussed which favor successful realization of gas etching, and a possible mechanism is presented for chemical reactions during etching of silicon by water vapor and hydrogen halides. Resumé.

1/1

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

1/2 009 UNCLASSIFIED PROCESSING DATE--04DEC70

TITLE--ARGENTOMETRIC METHOD FOR DETERMINING EPOXY GROUPS -U-

AUTHOR-(03)-CHAPURIN, V.I., SHAPOSHNIK, S.SH., MELNIKOVA, S.N.

COUNTRY OF INFO--USSR

SOURCE--LAKOKRASOCH. MATER. IKH PRIMEN. 1970, (2), 56-8

DATE PUBLISHED--------70

SUBJECT AREAS--MATERIALS

TOPIC TAGS--EPOXY RESIN, TITRATION, SILVER NITRATE/(U)ED5 EPOXY RESIN, (U)E41 EPOXY RESIN, (U)E49 EPOXY RESIN

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY FICHE NO----FD70/605012/D08 STEP NO--UR/0303/70/000/002/0056/0058

CIRC ACCESSION NO--AP0140296

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

2/2 009 UNCLASSIFIED PROCESSING DATE--04DEC70

CIRC ACCESSION NO--AP0140296

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. TO A SAMPLE OF AN EPOXY RESIN (DE 5, ED 5, E 41, OR E 49) A STOICHIOMETRIC EXCESS OF AQ. HBR WAS ADDED. THE EXCEDD HBR WAS REACTED WITH AGNO SUB3 AND THE AMT. OF AGNO SUB3 USED WAS DETD. BY THE TITRN. AGAINST NH SUB4 SCHN. THE METHOD IS VERY RAPID AND GIVES SATISFACTORY REPRODUCIBILITY AND ACCURACY.

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

1/2 019 UNCLASSIFIED PROCESSING DATE--02OCT70

TITLE--POSSIBLE USE OF COATINGS BASED ON CYCLO RUBBER RESIN IN THE FOOD INDUSTRY -U-

AUTHOR-(04)-SHAPOSHNIK, S.SH., CHAPURIN, V.I., SHCHELKUNOVA, M.S., KOUNER, M.S.

COUNTRY OF INFO--USSR

SOURCE--LAKOKRASOCH. MATER. IKH PRIMEN. 1970, (1) 31-4

DATE PUBLISHED--------70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES, MECH., IND., CIVIL AND MARINE ENGR

TOPIC TAGS--FOOD CONTAINER, COATING PACKAGING, RUBBER, PLASTICIZER

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1988/1627 STEP NO--UR/0303/70/000/001/0031/0034

CIRC ACCESSION NO--AP0106373

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

2/2 019 UNCLASSIFIED PROCESSING DATE--02OCT70

CIRC ACCESSION NO--AP0106373

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. FORMULATIONS WERE DEVELOPED SUITABLE FOR COATING FOOD CONTAINERS. THE UNDERCOATING CONTAINED CYCLO RUBBER (I) 27.0, DIOCTYL PHTHALATE (II) 10, FE OXIDE 13.5, TALC 13.5, AND SOLVENT R-4 46.0 PARTS. THE TOPCOAT CONTAINED I 27.0, II 10, TIO SUB2 27.0, AND R-4 46.0 PARTS. THE COATINGS WERE DRIED AT 80DEGREES FOR SIMILIAR TO 24 HR. THE CONTAINERS COATED WITH 2 LAYERS OF THE UNDERCOATING AND 4 LAYERS OF THE TOPCOAT WITHSTOOD THE CORROSIVE ACTION OF H SUB2 O, 1PERCENT TARTARIC ACID (III), OR 40PERCENT ALC. AND 1PERCENT III SOLNS. FOR SMALLER THAN OR EQUAL TO 10 MONTHS. THE UV SPECTRA OF THESE SOLNS. AFTER CONTACT WITH THE COATINGS SHOWED ONLY TRACES OF THE EXTD. ORG. COMPDS. PLASTICIZING THE COATINGS WITH NATURAL RUBBER, NATURAL OILS, OR LINSEED OIL GAVE LESS DURABLE COATINGS.

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

ARM/ESTC /HF-23

DEPARTMENT OF THE ARMY
U.S. ARMY FOREIGN SCIENCE AND TECHNOLOGY CENTER
220 SEVENTH STREET NE.
CHARLOTTESVILLE, VIRGINIA 22901

In Reply Refer to:
FSTC-HT-23-1095-72
DIA Task No. T70-23-01

Date: 26 December 1972

TRANSLATION

ENGLISH TITLE: ECONOMIC EFFECTIVENESS OF PROTECTIVE POLYMER COATINGS

UATC

AUTHOR: I.M. Barskaya, E. Sh. Shaposhnik, V.I. Shapovrin

SOURCE: Konservnaya I Ovoshchesushil'naya Promyshlennost' No. 1, 1971, pp 17-18

LANGUAGE: Russian

REQUESTOR: AMXRES-EQS

TRANSLATOR: ACSI K-1612

COUNTRY: USSR

KEY WORDS:

PLASTIC PRODUCTION
PLASTIC INDUSTRY
PROTECTIVE COATING
POLYMER
FOOD CANNING
FOOD TECHNOLOGY

SHAPOSHNIK, S.Sh.

Approved for public release. Distribution unlimited.

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

USSR

UDC 628.1.034:628.175:541.13

SHAPOSHNIK, V. A., RESHETNIKOVA, A. K., ZOLOTAREVA, R. I., DROBYSHEVA, I. V., and ISAYEV, N. I., Voronezh Technological Institute

"Water Demineralization by Means of Electrolysis With Intermembrane Ion Exchange Resin Filling"

Leningrad, Zhurnal Prikladnoy Khimii, Vol 46, No 12, Dec 73, pp 2659-2663

Abstract: A method was developed for production of highly desalinated water with a specific resistance of 15-20 MΩ·cm, based on a two-step electrodialysis combined with intermembrane filling of the desalination sections with a mixed layer of ion exchange resins KU-2 and AV-17. A preliminary sodium cationization had to be carried out in this process. It has been determined that filling the electrodialyzer sections with a mixed layer of the ion exchange resins increases the specific density of the current.

1/1

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

USSR

UDC 541.183.24

MELESHKO, V. P., SHAPOSHNIK, V. A., ISAYEV, N. I., and PESTUSHKO, N. N.
Voronezh Technological Institute

"Kinetics of Electrochemical Regeneration of Ion Exchange Resins"

Moscow, Zhurnal Fizicheskoy Khimii, Vol 45, No 1, Jan 71, p 196

Abstract: Electrochemical regeneration of ion exchange resins is based on removal of the absorbed ions by the action of electric potential gradient applied to it, and replacement of these ions by hydrogen or hydroxyl ions formed by electrode reactions. With high values of the applied potential gradient, the kinetics of the process is determined by the rate of removal of absorbed ions from the resin. A simplified formula is proposed for calculation of the degree of regeneration:

$$a = 1-e^{-k\tau}.$$

1/1

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

Ion Exchange Phenomena

USSR

UDC 541.183.24:661.183.123

MELESHKO, V. P., SHAPOSHNIK, V. A., and PESTUCHKO, N. N., Voronezh Technological Institute

"Kinetics of Electrochemical Regeneration of Highly Ionized Anion Exchange Resin AV-17"

Moscow, Zhurnal Fizicheskoy Khimii, Vol 47, No 8, Aug 73, pp 2153-2154

Abstract: The aim of the study was to evaluate the possibility of application of the equation $a=1-e^{-k}$ to the study of the kinetics of the process of electrochemical regeneration of the anion exchange resin AV-17. It was established that the rate of determining the stage of electrochemical regeneration is the removal of the regeneration products from the ion exchange granules into the solution.

1/1

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

1/2 020 UNCLASSIFIED PROCESSING DATE--20NOV70

TITLE--A DEVICE FOR SIMULATING PULSED INTERFERENCE -U-

AUTHOR-(05)-RAPPOPORT, L.I., KHVOSTENKO, A.I., KULAKOV, N.N., SHAPOSHNIK, V.I., KIRICHEK, V.A.

COUNTRY OF INFO--USSR

SOURCE--PATENT NO 260291, FILED 4 NOV 68

REFERENCE--MOSCOW, OTKRYTIYA, IZOBRETENIYA, PROMYSHLENNYYE OBRAZTSY,

DATE PUBLISHED--------70

SUBJECT AREAS--METHODS AND EQUIPMENT, ELECTRONICS AND ELECTRICAL ENGR.

TOPIC TAGS--PATENT, PULSE EXCITATION, PULSE GENERATOR, PULSE INTEGATOR, PULSE SIGNAL

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3001/0735 STEP NO--UR/0482/70/000/000/0000/0000

CIRC ACCESSION NO--AA0126443

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

2/2 020 UNCLASSIFIED

CIRC ACCESSION NO--AA0126443 PROCESSING DATE--20NOV70

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THIS AUTHOR'S CERTIFICATE INTRODUCES A DEVICE FOR SIMULATING PULSED INTERFERENCE. THE UNIT CONTAINS THE EQUIPMENT TO BE STUDIED, A POWER SUPPLY, CONTROL PULSE GENERATOR, AND SHUNTING DEVICE. AS A DISTINGUISHING FEATURE OF THE PATENT, THE DEVICE IS DESIGNED FOR PRODUCING INTERFERENCE WITH CONTROLLABLE POLARITY, AMPLITUDE, DURATION, AND PRF AND ALSO FOR ELIMINATING THE MUTUAL EFFECT OF THE INTERFERENCE SIMULATOR AND THE EQUIPMENT TO BE STUDIED. AN AUXILIARY DC POWER SUPPLY WITH CONTROLLABLE POLARITY AND AMPLITUDE OF THE OUTPUT VOLTAGE IS CONNECTED IN PARALLEL BOTH WITH THE EQUIPMENT TO BE STUDIED AND WITH ITS POWER SUPPLY BY MEANS OF A COMMUTATOR. THE OUTPUTS OF THE CONTROL PULSE GENERATOR ARE CONNECTED TO THE COMMUTATOR AND SHUNTING DEVICE, WHICH IS CONNECTED TO THE COMMUTATOR AND TO THE AUXILIARY POWER SUPPLY. FACILITY: DONETSKIY NAUCHNO-ISSLEDOVATEL'SKIY I PROYEKTNO-KONSTRUKTORSKIY INSTITUT AVTOMATIZATSII GORNYKH MASHIN.

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

USSR S UDC 681.333

RAPPOPORT, L. I., KHVOSTENKO, A. I., KULAKOV, N. N., SHAPOSHNIK, V. I., KIRICHEK, V. A., Donetsk Scientific Research Institute for the Planning and Design of Mining Machine Automation

"A Device for Simulating Pulsed Interference"

Moscow, Otkrytiya, Izobreteniya, Promyshlennyye Obraztsy, Tovarnyye Znaki, No 3, 1970, p 130, patent No 260291, filed 4 Nov 68

Abstract: This Author's Certificate introduces a device for simulating pulsed interference. The unit contains the equipment to be studied, a power supply, control pulse generator, and shunting device. As a distinguishing feature of the patent, the device is designed for producing interference with controllable polarity, amplitude, duration, and prf and also for eliminating the mutual effect of the interference simulator and the equipment to be studied. An auxiliary DC power supply with controllable polarity and amplitude of the output voltage is connected in parallel both with the equipment to be studied and with its power supply by means of a commutator. The outputs of the control pulse generator are connected to the commutator and shunting device, which is connected to the commutator and to the auxiliary power supply. 1/1

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

USSR

SHAPOSHNIKOV, A. A.

UDC: 621.372.832

"Waveguide Directional Coupler"

Elektron. tekhnika. Nauchno-tekh. sb. Kontrol'no-izmerit. apparatura (Electronic Engineering, Scientific-Technical Collection, Control and Measurement Equipment) 1970, No. 3(21), pp 67-73 (from RZh-Radiotekhnika, No. 3, March 71, Abstract No. 3B154)

Translation: A direction coupler is considered in which the coupling is done through narrow slots of equal length set at various angles to the waveguide axis. Resume

1/1

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

USSR

UDC 621.643.25

BURDENKOVA, Z. M., SHNURNOV, A. Ye., SHAPOSHNIKOV, A. P., and PANASYUK, V. S., Scientific Research Institute of Concrete and Reinforced Concrete (NIIZhB)

"Scientific Characteristics of High-Pressure Abrasion-Resistant Rock-Concrete Pipe"

Moscow, Stroitel'stvo Truboprovodov, No 9, Sep 73, pp 15-17

Abstract: A new construction of abrasion-resistant high-pressure rock-concrete pipes, 5300 mm long, ID=1500 mm, OD=2500 mm, is in development by NIIZhB. In order to determine the strength of these pipes and their agreement with theoretical calculations, first were tested for strength at inner hydrostatic pressure and at outer load specimens of rock-concrete bushings for pipe cores. In determining their supporting power by the bending moment $M=P\cdot r_m/\pi$, where P=linear concentrated force in kg·cm/m and r_m= =radius to middle wall thickness, the specimens were considered as thin wall structures ($h/D\leqslant 1/10$). Their derived deformation curves at outer load show that the rock-concrete material works within the elastic limit up to the development of cracks. A separate testing of the reinforcement revealed that in determining

1/2

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

USSR

BUARDENKOVA, Z. M., et al., Stroitel'stvo Truboprovodov, No 9, Sept 73, pp 15-17

the strength of reinforced rock-concrete pipes their resisting force can be taken only 10-15 % of their tensile strength. The characteristics of industrially manufactured rock-concrete pipes are indicated and recommendations are given to favor their introduction in practice.

2/2

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

1/2 014 UNCLASSIFIED PROCESSING DATE--20NOV70

TITLE--DYNAMICS OF THE MAGNETIC MOMENT OF A PARAMAGNETIC -U-

AUTHOR-(02)-KACYROV, D.I., SHAPOSHNIKOV, I.G.

COUNTRY OF INFO--USSR

SOURCE--FIZIKA METALLOV I METALLOVEDENIE, JAN. 1970, 29 (1), 58-80

DATE PUBLISHED--------70

SUBJECT AREAS--PHYSICS

TOPIC TAGS--MAGNETIC MOMENT, PARAMAGNETIC METAL, INTERGRODIFFERENTIAL EQUATION

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--2000/1286 STEP NO--UR/0126/70/029/001/0058/0080

CIRC ACCESSION NO--AP0124937

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

2/2 014 UNCLASSIFIED PROCESSING DATE--20NOV70

CIRC ACCESSION NO--AP0124937

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE PRESENT STATE OF THE THEORY OF PARAMAGNETIC METALS IS REVIEWED WITH SPECIAL REF. TO THE DYNAMICS OF THE MAGNETIC MOMENT, THAT IS, THE EVOLUTION (IN TIME) OF THE MACROSCOPIC MAGNETIC MOMENT OF A PARAMAGNETIC SITUATED IN A SPECIFIED EXTERNAL MAGNETIC FIELD. A SYSTEM OF INTEGRO DIFFERENTIAL EQUATIONS IS DERVICED FOR THE MAGNETIC MOMENT AND OTHER MAGNETIC PARAMETERS, GIVING A COMPLETE PICTURE OF THE MAGNETIC STATE OF THE MATERIAL AT ANY SPECIFIED INSTANT. THE SYSTEM OF EQUATIONS MAY BE SIMPLIFIED IN THE CASE OF SLOWLY VARYING MAGNETIC FIELDS.

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

Acc. Nr.: AT0100167

Ref. Code: UR0020

JPRS 49937

New Region in Cuba Promising for Petroleum Production

(Abstract: "A New Region in Cuba Promising for Petroleum," by K. K. Shaposhnikov and K. I. Shaposhinkova, Moscow Institute of the Petro-chemical and Gas Industry; Moscow, Doklady Akademii Nauk SSSR, Vol 190, No 1, 1970, pp 180-182)

Until now only one region in Cuba has been known to have petroleum deposits, the so-called Central Basin. During 1964-1966 the Cuban Institute of Mineral Resources, with the participation of the authors, for the first time carried out one- and two-milligal gravimetric surveys in eastern Cuba. These revealed a number of new tectonic elements in the investigated region. In particular, to the east of Camaguey the party discovered the California gravity minimum, corresponding to a Mesozoic-Cenozoic depression. Judging from the gravity anomalies, the basin has an oval configuration extending in a latitudinal direction; it measures 70 x 20 km. The northern and easrern boundaries of the basin are major faults. On the southern side the basin is evidently bounded by another fault, but it is less clearly expressed in the gravity field. The depression contains deposits of the Middle and Upper Eocene and Miocene -- coarse breccias, conglomerates, limestones

1
2

Reel/Frame
19841546

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

AT0100167

and marls. The basin is surrounded primarily by volcanic formations of the Cretaceous and intrusives of acidic and basic composition. Only on the northern edge of the basin are there outcrops of Upper Cretaceous sediments (limestrones, argillites) with bitumen inclusions. The gravity minimum consists of four minima (-34, -38, -29 and -20 mgal), separated by sectors of relatively high gravity readings. The largest of the latter is the Bertha maximum. It is situated in the central part of the basin, is oriented NW-SE and consists of two domes (the text is accompanied by a map). Geological-geophysical data indicate a great similarity between the area of the California minimum and the Central petroleum basin, situated 150 km to the northwest. First, the gravity and magnetic fields of both basins are very similar and are characterized by gravity anomalies which are minimum for all of Cuba and a relatively quiet magnetic field. Second, both are represented by very thick Tertiary deposits. Third, there is basis for surmising that the California basin contains Upper Cretaceous deposits because they are found along its edges; in the Central Basin these sediments have yielded petroleum. Fourth, both basins are bounded by major faults. There is evidence that the California and Central basins are similar in geological structure and therefore the former should be explored for petroleum.

2/2

19841547

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

USSR

UDC 616.5-092:613.1(98)

SHAPOSHNIKOV, O. K. and DERKACHEV, Ye. F., Chair of Skin and Veneral Diseases, Military Medical Academy imeni S. M. Kirov

"Effect of Climate on the Development of Some Dermatoses in the Far North"

Moscow, Vestnik Dermatologii i Venerologii, No 9, 1971, pp 11-13

Abstract: Analysis of the case histories of persons hospitalized over a period of 10 years in the Far North (Kila Peninsula) for various forms of pyodermatitis (702) and microbial eczema (1000) clearly implicated weather conditions in the origin of these skin diseases. The incidence of pyodermatitis is characterized by 2 peaks, winter (December to February) and summer (July and August). The winter peak is attributed to the lack of sunlight and prolonged low temperatures combined with high humidity and strong winds, resulting in overchilling and lowered resistance. The summer peak is apparently due to the high humidity and little wind, which create favorable conditions for the development of pathogenic flora. Microbial eczema occurs most often in May and October, transitional months marked by extreme weather instability. More than half the cases of pyodermatitis and eczema develop during the first year of the individuals' stay in the Far North. The number drops sharply and steadily thereafter as they become acclimatized.

1/1

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

AA0043544

UR 0482

Soviet Inventions Illustrated, Section II Electrical, Derwent,

2/70

243283 ZERO INDICATOR for use in the field of automatic and computer techniques. The inventor's earlier patent No. 179096 has been further improved and it's drawback of a low quick action, has been eliminated by introducing a delay system for forming impulses. The zero indicator system contains modulator 1, booster 2 of variable voltage an amplitude detector 3, delay line 4 and impulse forming system 5. With a positive voltage, voltage of definite polarity passes through the discharge end of the detector. The feed back is positive and oscilations of a certain amplitude are stimulated, the amplitude of which are related to the coefficient of amplification and that of the feed back.

27.2.68 as 1221222/18-24 Add to 179096. R.D.SHAPOSHNIKOV & G.G.SINENKO (23.9.69) Bul 16/5.5.69.Class 42m. Int.Cl.G 06j.

1/2

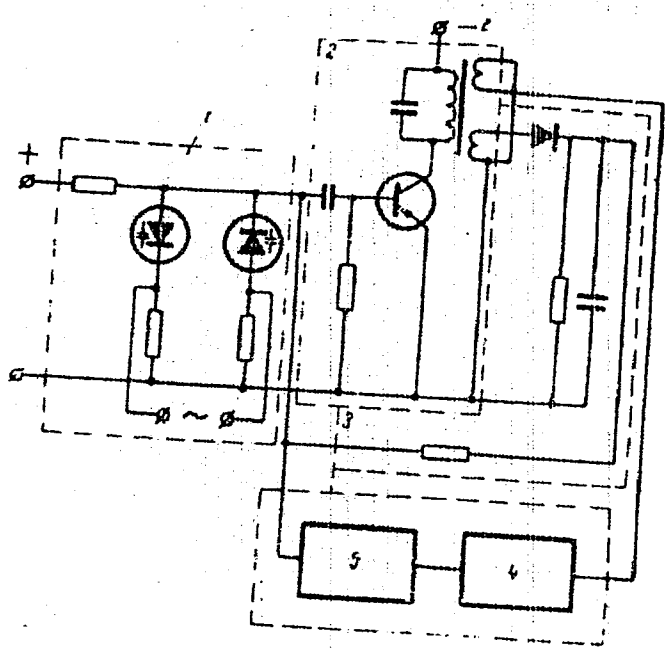
4

19761982

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

AA0043544



2/2

19761983

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

USSR

UDC 536.248.2+536.483

VISHNEV, I. P., VINOKUR, Ya. G., SHAPOSHNIKOV, V. A., GOROKHOV, V. V.

"Influence of Pressure on Bubble Boiling Crisis of Helium-1 in Vertical Channels"

Moscow, Doklady Akademii Nauk SSSR, Vol 206, No 5, 1972, pp 1,090-1,092.

Abstract: The purpose of this work was to determine the first critical heat flux for helium boiling in vertical channels under conditions of natural circulation and on the surface of a vertical cylinder in a large volume at other than atmospheric pressures. During each experiment, the heat flux was increased until the wall temperature began to rise sharply. The heat flux corresponding to this moment was taken as the critical heat flux. The author's found that the first critical heat flux in liquid helium depends on vapor content and flow rate, and also on the ratio of absolute dimensions of the channel within the limits $0 < L/d < 15$, and suggests an equation for the calculation of q_{cr_1} at distance x from the entry to a vertical channel at atmospheric pressure. When the pressure is other than atmospheric, the factors above must be supplemented by the density of helium vapor and heat of evaporation at the pressure used. A formula is presented which can describe the process at various pressures. Experimental and calculated data agree satisfactorily.

1/1

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

USSR

UDC 624.19.04

SLAVIN, O. K., SHAPOSHNIKOV, V. N., Moscow

"Modeling of Diffraction of Stress Waves Near Tunnels by a Method of Dynamic Photoelasticity"

Moscow, Stroyitel'naya Mekhanika i Raschet Soyoruzheniy, No 5, 1972, pp 36-40.

Abstract: The solution of diffraction problems when the wavelength of the exciting wave is comparable to the dimensions of the diffracting obstacles is a very difficult problem for mathematical computation, requiring the use of numerical methods with digital computers. Therefore, experimental methods of studying unstable wave processes, including the method of dynamic photoelasticity, are quite important. This article presents experimental results produced by modeling three characteristic classes of diffraction problems by dynamic photoelasticity. Stress waves were excited in a thin plate 3 mm thick of a high-modular polymer by exploding a point charge of lead azide. The light source used was a flash tube. The interference band pictures were interpreted on the basis of the dependence between birefringence and stresses. The studies showed that the effect of stress concentration, primarily resulting from the presence of heterogeneities of finite dimensions in a continuous medium, has a dual nature: the geometric nature, related to the D/L parameter, and the physical nature, related to the $\rho_m C_m/\rho C$ parameter. The studies

1/2

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

USSR

UDC 624.19.04

SLAVIN, O. K., SHAPOSHNIKOV, V. N., Moscow, Stroyitel'naya Mekhanika i Raschet Soyoruzheniy, No 5, 1972, pp 36-40.

revealed the nature of the influence of parameters D/L and n on the solution of the diffraction problem, allowing expedient control of this effect. The studies indicated that during explosive drilling work, explosions should be calculated to excite a wave, the length of which is less than or equal to the characteristic transverse dimension of the mine.

2/2

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

UNCLASSIFIED

TITLE--EARLY GENERALIZATION OF THE PROCESS IN LATERAL AMYOTROPHIC SCLEROSIS -U-

PROCESSING DATE--30OCT70

AUTHOR--SHAPOSHNIKOV, YE.A.

COUNTRY OF INFO--USSR

SOURCE--KLINICHESKAYA MEDITSINA, 1970, VOL 48, NR 5, PP 76-81

DATE PUBLISHED--------70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES

TOPIC TAGS--ELECTROMYOGRAPHY, MUSCULAR ATROPHY

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3002/1760

STEP NO--UR/0497/70/048/005/0076/0081

CIRC ACCESSION NO--AP0129128

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

2/2 011 UNCLASSIFIED PROCESSING DATE--30OCT70

CIRC ACCESSION NO--AP0129128

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THIRTY PATIENTS SUFFERING FROM LATERAL AMYOTROPHIC SCLEROSIS (CERVICOTHORACIC AND LUMBOSACRAL FORMS) WITHOUT CLINICAL SIGNS OF INJURY OF THE BRAIN STEM. AT THE SUBCLINICAL STAGE OF THE PROCESS THERE WERE REVEALED ELECTROMYOGRAPHIC SIGNS OF INSUFFICIENCY OF NUCLEAR AND SUPRANUCLEAR STEAM MOTOR FORMATIONS; THIS SUBSEQUENTLY CORRELATED WITH THE APPEARANCE OF A NUMBER OF STEM MICROSYMPTOMS. THE DATA DERIVED TESTIFY TO EARLY SUBCLINICAL GENERALIZATION OF THE PROCESS ALONG THE ENTIRE CEREBROCRANIAL AXIS IN LATERAL AMYOTROPHIC SCLEROSIS. FACILITY: INSTITUT NEVROLOGII AMN SSSR.

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

1/2 018 UNCLASSIFIED PROCESSING DATE--30OCT70

TITLE--ON SOME "MICROSYMPTOMS" OF AMYOTROPHIC LATERAL SCLEROSIS -U-

AUTHOR--SHAPOSHNIKOV, YE.A.

COUNTRY OF INFO--USSR

SOURCE--VRACHEBNOYE DELO, 1970, NR 6, PP 99-101

DATE PUBLISHED--------70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES

TOPIC TAGS--MUSCULAR ATROPHY, NERVOUS SYSTEM, DIAGNOSTIC MEDICINE

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3002/1755 STEP NO--UR/0475/70/000/006/0099/0101

CIRC ACCESSION NO--AP0129123

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

2/2 018 UNCLASSIFIED

CIRC ACCESSION NO--AP0129123 PROCESSING DATE--30OCT70

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. A THOROUGH INVESTIGATION OF 40 PATIENTS WITH AMYOTROPHIC LATERAL SCLEROSIS (CERVICOTHORACIC AND LUMBO SACRAL FORMS) REVEALED SEVERAL PHENOMENA, TOPICALLY CONNECTED WITH LEVELS AT A DISTANCE FROM THE MAIN FOCUS IN THE CEREBRO SPINAL AXIS. THESE MINOR CHANGES PRECEDE THE DEVELOPMENT OF THE CLASSIC SYMPTOMS OF INVOLVEMENT OF THE CENTRAL AND PERIPHERIC MOTOR NEURON, EVIDENCING EARLY GENERALIZATION OF THE PROCESS IN AMYOTROPHIC LATERAL SCLEROSIS.

FACILITY: INSTITUT NEVROLOGII AMN SSSR.

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

USSR

UDC 621.316.99:621.315.1.3.024(083.8)

TURETSKIY, V. YE., BERKOVSKIY, A. M., SHAPOSHNIKOV, I. N., MELIK-SARKISOV, B. S.

"High Voltage Remote Operating Ground"

USSR Author's Certificate No 270062, Filed 12 Jul 65, Published 13 Aug 70 (from RZh-Elektrotekhnika i Energetika, No 3, Mar 71, Abstract No 3Ye154P)

Translation: A scheme is proposed for a remote operating ground executed by wires split into two equal insulated branches. A measurement and relay protect circuit is provided to insure continuous control of the state of the ground branches. An auxiliary power transformer with the secondary winding midpoint joined to the ground circuit of the substation is used in the ground unit. The ground wires are connected to the secondary winding leads of the transformer. The primary winding of the transformer is connected to the 380 volt AC network. Control of the state of repair of the ground circuit is realized with respect to the presence and magnitude of the current in the branches of the ground lines and the primary winding of the transformer. Signal relays and a balanced protection circuit are used. The unit is applied in the operating circuit of two-pole and single-pole PPT [semiconductor triode?] lines. There is 1 illustration.

1/1

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

Acc. Nr.: AT0100167

Ref. Code: UR0020

JPRS 49937

New Region in Cuba Promising for Petroleum Production

(Abstract: "A New Region in Cuba Promising for Petroleum," by K. K. Shaposhnikov and K. I. Shaposhnikova, Moscow Institute of the Petro-chemical and Gas Industry; Moscow, Doklady Akademii Nauk SSSR, Vol 190, No 1, 1970, pp 180-182)

Until now only one region in Cuba has been known to have petroleum deposits, the so-called Central Basin. During 1964-1966 the Cuban Institute of Mineral Resources, with the participation of the authors, for the first time carried out one- and two-milligal gravimetric surveys in eastern Cuba. These revealed a number of new tectonic elements in the investigated region. In particular, to the east of Camaguey the party discovered the California gravity minimum, corresponding to a Mesozoic-Cenozoic depression. Judging from the gravity anomalies, the basin has an oval configuration extending in a latitudinal direction; it measures 70 x 20 km. The northern and easrern boundaries of the basin are major faults. On the southern side the basin is evidently bounded by another fault, but it is less clearly expressed in the gravity field. The depression contains deposits of the Middle and Upper Eocene and Miocene -- coarse breccias, conglomerates, limestones

1/2

Reel/Frame
19841546

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

AT0100167..

and marls. The basin is surrounded primarily by volcanic formations of the Cretaceous and intrusives of acidic and basic composition. Only on the northern edge of the basin are there outcrops of Upper Cretaceous sediments (limestrones, argillites) with bitumen inclusions. The gravity minimum consists of four minima (-34, -38, -29 and -20 mgal), separated by sectors of relatively high gravity readings. The largest of the latter is the Bertha maximum. It is situated in the central part of the basin, is oriented NW-SE and consists of two domes (the text is accompanied by a map). Geological-geophysical data indicate a great similarity between the area of the California minimum and the Central petroleum basin, situated 150 km to the northwest. First, the gravity and magnetic fields of both basins are very similar and are characterized by gravity anomalies which are minimum for all of Cuba and a relatively quiet magnetic field. Second, both are represented by very thick Tertiary deposits. Third, there is basis for surmising that the California basin contains Upper Cretaceous deposits because they are found along its edges; in the Central Basin these sediments have yielded petroleum. Fourth, both basins are bounded by major faults. There is evidence that the California and Central basins are similar in geological structure and therefore the former should be explored for petroleum.

2/2

19841547

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

1/2 013 UNCLASSIFIED PROCESSING DATE--04DEC70

TITLE--FLUOROMETRIC METHOD FOR DETERMINING PHEOPHYTIN IN PLANT LEAVES -U-

AUTHOR-(02)-KRASNOVSKIY, A.A., SHAPOSHNIKOVA, M.G.

COUNTRY OF INFO--USSR

SOURCE--FIZIOL. RAST. 1970, 17(2) 436-9

DATE PUBLISHED--------70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES

TOPIC TAGS--BIOLOGIC PIGMENT, THIN LAYER CHROMATOGRAPHY, CHROMATOGRAPHIC SEPARATION, PLANT PHYSIOLOGY, CHEMICAL ANALYSIS, FLUOROMETER, CHLOROPHYLL

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3003/1094 STEP NO--UR/0326/70/017/002/0436/0439

CIRC ACCESSION NO--AP0130127

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

2/2 013

UNCLASSIFIED

CIRC ACCESSION NO--AP0130127 PROCESSING DATE--04DEC70

ABSTRACT/EXTRACT--(U) GP-0-, ABSTRACT. PHEOPHYTIN (I) IS ASSAYED IN PLANT LEAVES BY THIN LAYER CHROMATOGRAPHIC SEPN. AND MEASUREMENT OF THE FLUORESCENCE OF THE I ELUATES. THE AMT. OF I DETD. IN LEAVES VARIED BETWEEN 1.5 AND 2.3PERCENT OF THE TOTAL AMT. OF CHLOROPHYLLS A PLUS B.

FACILITY: A. N. BAKH INST. BIOCHEM., MOSCOW, USSR.

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

USSR

UDC 621.332.2

GUTKIN, A. A., KAGAN, M. B., LEBEDEV, A. A., KHOLEV, B. A., SHAPOSHNIKOVA, T. A.

"Nonadditive Photoeffect During Combined Excitation in GaAs p-i-n-Structures"

Leningrad, Fizika i Tekhnika Poluprovodnikov, Vol 6, No 2, 1972, pp 237-241

Abstract: Results are presented from studying the photoeffect during combined excitation in p-i-n-structures of GaAs alloyed with Cr. Light from the admixture and the characteristic absorption bands was used at room temperature. The study revealed mutual signal amplification. With constant illumination, the relative increase in the photocurrent $I_k/I_{ad} + I_{char}$ reaches 10, and with modulation of one of the light fluxes, the variable signal component can increase by 100 times and more. The effect is observed for $\hbar\omega \geq 0.7$ electron volts. In the admixture region the photocurrent depends linearly on the illumination, and in the characteristic region it depends superlinearly. During combined excitation, the lux-ampere characteristic is sublinear. A qualitative model was investigated which explains the observed amplification of the photoresponse by an increase in the effective lifetime in the quasineutral region with illumination of the diode by admixture light. The experimental results agree well with the proposed model. The amplification of the photoresponse is not specific to the given diodes, but it is possible if the width of the

1/2

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

USSR

GUTKIN, A. A., Fizika i Tekhnika Poluprovodnikov, Vol 6, No 2, 1972, pp 237-241

quasineutral regions between the illuminated surface and the volumetric charge surface is greater than L_D (the length of the diffusion shift of the minority current carriers).

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

USSR

GUTKIN, A. A., LEBEDEV, A. A., RADU, R. K., TALALAKIN, G. N., and SHAPOSHNIKOVA, T. A.

UDC: 621.315.592

"Investigating the Spectra of Photoionization Cross Sections in GaAs Alloyed with Cr, Using the Photocapacitive Effect in Structures with a Potential Barrier"

Leningrad, Fizika i tekhnika poluprovodnikov, No 10, 1972, pp 1954-1960

Abstract: The purpose of this paper is to investigate the photocapacities in GaAs structures alloyed with Cr, and thereby obtain photoionization cross section spectra of deep centers. This idea is based on theoretical work published in earlier papers regarding an impurity photoeffect in the space-charge layer of a p-n junction and its connection with the parameters of impurity centers. Using the results of this theoretical work, the authors qualitatively explain the absorption spectra characteristic of the three types of specimens investigated. These are: surface-barrier diodes obtained by chemical precipitation of gold on n-type GaAs alloyed with Cr; p-i-n GaAs diodes obtained by successive diffusion of chromium and zinc in n-type GaAs; p-i-n GaAs diodes obtained by epitaxial

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

USSR

GUTKIN, A. A., et al, Fizika i tekhnika poluprovodnikov, No 10, 1972, pp 1954-1960

UDC: 621.315.592

growth of i and n layers of GaAs with a Cr additive on a p-type GaAs substrate. The kinetics of the change in the barrier capacitance of the structures under the action of mixed lighting in the photon energy region of 0.55-1.3 ev is also investigated. The authors thank D. N. Nasledov for his interest in the work, and M. B. Kagan and B. A. Kholev for supplying the specimens.

2/2

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

USSR

UDC: 621.315.592

GUTKIN, A. A., LEBEDEV, A. A., TALALAKIN, G. N., and SHAROSHNIKOVA [illegible] A.,
Physicotechnical Institute imeni Ioffe, Acad. Sci. USSR, Leningrad

"Photoconductivity of Semi-Insulator GaAs Doped With Cr in Strong Electric Fields"

Leningrad, Fizika i tekhnika poluprovodnikov, vol 6, No 6, 1972, pp 1067-1071

Abstract: This paper discusses the N-shaped volt-ampere characteristics of high-resistance GaAs alloyed with chromium and their accompanying spontaneous low-frequency current oscillations. The experiments of this research involved the measurement of photoconductivity with the Q-1 monochromator using an SiO_2 prism with unmodulated illumination from the KIM12-100 incandescent lamp. The GaAs specimens were prepared by the Chokhral'skiy method, with a resistivity of 10^6-10^8 ohm·cm at room temperature; their contacts were obtained by melting an In-Au alloy at 400° C. The photoconductivity spectral distribution obtained for various electric field intensities is plotted. The authors express gratitude to D. N. Nasledov and N. M. Kolchanov for their useful comments.

1/1

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

1/2 027

UNCLASSIFIED

TITLE--BEHAVIOR OF SPHERICAL POLYMER PARTICLES UNDER CONDITIONS OF STRAIN DEFORMATION -U-

PROCESSING DATE--30OCT70

AUTHOR-(04)-KARGIN, V.A., SOGOLOVA, T.I., SHAPOSHNIKOVA, T.K., TOPURIDZE, N.S.

COUNTRY OF INFO--USSR

S

SOURCE--VYSOKOMOL. SOEDIN. SER. A 1970, 12(4), 906-10

DATE PUBLISHED--------70

SUBJECT AREAS--CHEMISTRY, MATERIALS

TOPIC TAGS--NATURAL RUBBER, BUTADIENE STYRENE RESIN, ELONGATION, MATERIAL DEFORMATION

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--2000/1685

STEP NO--UR/0459/70/012/004/0906/0910

CIRC ACCESSION NO--AP0125306

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

2/2 027 UNCLASSIFIED

CIRC ACCESSION NO--AP0125306 PROCESSING DATE--30OCT70

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE ADDN. OF THE SPHERICAL DROPLETS OF NATURAL RUBBER LATEX OR BUTADIENE STYRENE COPOLYMER LATEX TO PARTIALLY EVAPO. SOLNS. OF THESE RUBBERS IN C SUB6 H SUB6, FOLLOWED BY EVAPN. GAVE MODELS OF FILMS CONSISTING OF AMORPHOUS PHASE AND LARGE (5-300 MU DIAM.) GLOBULES. THE OPTICAL MICROSCOPY OF THESE MODELS SUBJECTED TO ELONGATING STRESSES SHOWED THAT THE DEFORMATION OF THE GLOBULES (CONTINUOUS OR STEPWISE) DEPENDS ON THEIR NO., DISTRIBUTION, AND INTERACTIONS WITH THE AMORPHOUS PHASE. FACILITY: FIZ.-KHIM. INST. IM. KARPOVA, MOSCOW, USSR.

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

1/2 053 UNCLASSIFIED PROCESSING DATE--02OCT70

TITLE--MODIFICATION OF THE SUPRAMOLECULAR STRUCTURE AND MECHANICAL BEHAVIOR OF POLYCAPROLACTAM BY PHYSICAL METHODS -U-

AUTHOR-(04)-KARGIN, V.A., SOGOLOVA, T.I., SHAPOSHNIKOVA, T.K., KORSHUNOVA, N.T.

COUNTRY OF INFO--USSR

SOURCE--VYSOKOMOL. SOEDIN., SER. A 1970, 12(3) 649-55

DATE PUBLISHED--------70

SUBJECT AREAS--CHEMISTRY, MATERIALS, PHYSICS

TOPIC TAGS--MOLECULAR STRUCTURE, PLASTIC MECHANICAL PROPERTY, CAPROLACTAM, POLYMERIZATION, PLASTIC FABRICATION, MOLECULAR WEIGHT, POLYMER STRUCTURE, NUCLEATION, FILLER, POLYMER PHYSICAL PROPERTY, GRAPHITE, ALUMINUM OXIDE, KAOLIN, TALC

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1992/0298 STEP NO--UR/0459/70/012/003/0649/0655

CIRC ACCESSION NO--AP0111492

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

2/2 053

UNCLASSIFIED

CIRC ACCESSION NO--AP0111492 PROCESSING DATE--02OCT70

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE PHYS. PROPERTIES (IMPACT STRENGTH (I), HARDNESS (H), BENDING STRENGTH (B), RUB RESISTANCE (R)), OF POLYCAPROAMIDE (I), OBTAINED BY THE POLYMN. DIRECTILY IN THE MOLD WERE EFFECTIVELY REGULATED BY CHANGING THE TEMP. OF THE MOLDING MIXT. PREPN. THE MIXT. CONTAINED THE MONOMER, 0.3 MOLE PERCENT (ON MONOMER WT.) NA METAL, AND 0.3 MOLE PERCENT N,ACETYLCAPROLACTAM (POLYMN. ACTIVATOR) AND WAS PREPD. AT 110DEGREES-94DEGREES. THE MOLDING WAS CARRIED OUT 1.5 HR AT 180 PLUS OR MINUS 2DEGREES AND THE COOLING RATE WAS 2DEGREES-MIN. WHEN THE POLYMN. MIXT. WAS PREPD. AT 110-25DEGREES, I HAD HIGH I BUT LOW H AND B; 133-7DEGREES MIXT. PREPN. TEMPS. INCREASED H AND B, BUT DECREASED I; 185-97DEGREES MIXT. PREPN. TEMPS. INCREASED R CONSIDERABLY. THE MIXT. PREPN. TEMPS. NOT ONLY AFFECT THE MOL. WT. OF I, BUT ALSO ALTER ITS STRUCTURE. THE ADDN. TO THE POLYMN. MIXT. OF 0.5 WT. PERCENT POWD. PBO, AL SUB2 O SUB3, TIO SUB2, GRAPHITE, TALC, OR KAOLIN AS THE NUCLEATION CENTERS ALSO CHANGES I, H, B, AND R. THE USE OF ACTIVE SUPPORTS (TEFLON, GLASS, AL FOIL) AS THE MOLD LIVINGS ALSO MODIFIES THE STRUCTURE AND THE PHYS. PROPERTIES OF I.

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

USSR

SHAPOT, V. S., Corresponding Member, Academy of Medical Sciences USSR

UDC 595.3

"Molecular and Genetic Aspects of Malignant Degeneration"

Moscow, Zhurnal Vsesoyuznogo Khimicheskogo Obshchestva imeni D. I. Mendeleyeva, No 6, 1970, pp 690-699

Abstract: It is evident from this review of the literature that malignant degeneration is a complex, multistage, and largely unidirectional process. Two main theories have been advanced to account for the transformation of normal cells into malignant ones: (1) mutation of somatic cells and (2) functional deviations in the cell genome (rather than changes in the genetic apparatus of the cell). Each type of cell whose differentiation is complete contains a unique, delicate mosaic of active and blocked portions of the genome fixed by heredity (epigenomic heredity), i.e., after division the daughter cells possess the same properties as the parent cells. It is the author's view that epigenomic changes that do not affect the structure of the cell genome proper are the most probable mechanism of malignant degeneration, which is similar in several important respects to the mechanism responsible for differentiation. Acquisition by a cell of the capacity for

1/2

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

USSR

SHAPOT, V. S., Zhurnal Vsesoyuznogo Khimicheskogo Obshchestva imeni D. I. Mendeleyeva, No 6, 1970, pp 690-699

uncontrollable growth in the initial stage of malignant degeneration may predetermine the direction of the progression toward dedifferentiation.

2/2
3/3

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

1/2 018 UNCLASSIFIED PROCESSING DATE--30OCT70

TITLE--LIPORIBONUCLEOPROTEIN COMPLEX AS AN INTEGRAL PART OF ANIMAL CELL PLASMA MEMBRANES -U-

AUTHOR-(02)-DAVYDOVA, S.YA., SHAPOT, V.S.

S

COUNTRY OF INFO--USSR

SOURCE--FEBS (FED. EUR. BIOCHEM. SOC.) LETT. 1970, 6(4), 349-51

DATE PUBLISHED--------70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES

TOPIC TAGS--LIVER, TUMOR, RNA, CELL MEMBRANE, NUCLEOPROTEIN

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3001/0931 STEP NO--NE/0000/70/006/004/0349/0351

CIRC ACCESSION NO--AP0126590

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

2/2 018 UNCLASSIFIED PROCESSING DATE--30OCT70

CIRC ACCESSION NO--AP0126590

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. PLASMA MEMBRANE RNA FROM RAT LIVER AND RAT HEPTOMA ARE INTEGRATED INTO A TRIPLE LIPORIBONUCLEOPROTEIN COMPLEX. FACILITY: INST. EXP. CLIN. ONCOL., MOSCOW, USSR.

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

1/2 020 UNCLASSIFIED PROCESSING DATE--16OCT70

TITLE--TO THE EFFECT OF TUMOR DEVELOPMENT IN GLYCOGEN DEPOSIT IN THE LIVER -U-

AUTHOR-(02)-TAGIZADE, S.B., SHAPOT, V.S.

COUNTRY OF INFO--USSR

SOURCE--VOPROSY MEDITSINSKOY KHIMII, 1970, VOL 16, NR 3, PP 254-258

DATE PUBLISHED--------70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES

TOPIC TAGS--TUMOR, GLYCOGEN, LIVER, EPINEPHRINE, SARCOMA, CARCINOMA, MOUSE, RAT GLUCOSE

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1998/0228 STEP NO--UR/0301/70/016/003/0254/0258

CIRC ACCESSION NO--AP0120921

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

2/2 020 UNCLASSIFIED PROCESSING DATE--16OCT70

CIRC ACCESSION NO--AP0120921

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE EFFECT OF TUMOR DEVELOPMENT ON GLYCOGEN DEPOSIT IN THE LIVER BY MEANS OF EPINEPHRINE TEST IN 5 STRAINS (SARCOMA M SUB1, GERENE AND OVARIAN CARCINOMA, AND CROCKER AND EHRLICH MICE CARCINOMA) HAS BEEN STUDIED. THE EXPERIMENTS WERE CARRIED OUT ON 1176 MICE AND RATS. THREE SERIES OF EXPERIMENTS WERE MADE: THE ANIMALS OF THE FIRST GROUP WERE KEPT ON ORDINARY RATION, IN THE SECOND WERE SATURATED WITH GLUCOSE, AND IN THE THIRD WERE STARVED 24 H BEFORE THE EXPERIMENT. THE CONCLUSION WAS MADE: THE DECREASE IN LIVER GLYCOGEN SUPPLY DURING THE TUMOR DEVELOPMENT GOES INDEPENDENTLY ON THE STRAIN OF TUMOR. THE MORE IS THE INTENSITY OF TUMOR GROWTH, THE GREATER IS THE DECREASE. THE FALL IN LIVER GLYCOGEN SUPPLY IS NOT CONNECTED WITH THE DISORDERS IN GLYCOGEN SYNTHESIS. DURING THE APPRECIABLE SUPPLY OF ORGANISM OF TUMOR BEARING ANIMALS WITH GLUCOSE THE LIVER CAN DEPOSIT ITS SURPLUS AS GLYCOGEN. AFTER THE DEPLETION OF GLYCOGEN SUPPLY THE LIVER OF TUMOR BEARING ANIMALS CAN FORM GLYCOGEN FROM THE PROTEINS AND LIPIDS. IN THE COURSE OF TUMOR DEVELOPMENT THE ABILITY OF LIVER TO GLYCOGENOLYSIS DOES NOT CHANGE. THE DEPLETION OF LIVER GLYCOGEN SUPPLY DURING THE TUMOR DEVELOPMENT AND MAINTENANCE OF LIVER ABILITY TO GLYCOGEN SYNTHESIS IS CONNECTED WITH THE GLUCOSE CONSUMPTION BY THE MALIGNANT CELLS. FACILITY: RESEARCH INSTITUTE OF ROENTGENOLOGY, RADIOLOGY AND ONCOLOGY, AZERBAIDJAN SSR, BAKU.

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

1/2 021 UNCLASSIFIED PROCESSING DATE--11SEP70

TITLE--ENHANCEMENT IN S PRIME35 METHIONINE INCORPORATION INTO PROTEINS OF EXPERIMENTAL TUMORS OF RATS AND MICE AT THE INCREASED CONSUMPTION OF

AUTHOR--TAGIZADE, S.B., SHAPOT, V.S.

S

COUNTRY OF INFO--USSR

SOURCE--VOPROSY MEDITSINSKOY KHIMII, 1970, VOL 16, NR 2 PP 142-147

DATE PUBLISHED--------70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES

TOPIC TAGS--SULFUR, CHEMICAL LABELLING, METHIONINE, TUMOR, PROTEIN, BIOSYNTHESIS

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1986/0792 STEP NO--UR/0301/70/016/002/0142/0147

CIRC ACCESSION NO--AP0102755

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

2/2 021 UNCLASSIFIED PROCESSING DATE--11SEP70

CIRC ACCESSION NO--AP0102755

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. METHIONINE S PRIME35 INCORPORATION INTO PROTEINS OF LIVER AND TUMORS AT HYPERGLYCAEMIA (250-300 MGPERCENT) OR INCREASED CONSUMPTION WITH OXYGEN BY MEANS OF INHALATION (SOLID TUMORS) OR I. P. OXYGEN ADMINISTRATION (ASCITES) WAS STUDIED. 320 RATS AND MICE WITH FIVE DIFFERENT TRANSPLANTABLE TUMORS (SARCOMA M SUB1, GERENE CARCINOMA, KROCKER SARCOMA AND EHRLICH CARCINOMA) WERE USED THROUGHOUT THE EXPERIMENTS. RADIOACTIVE MET IONINE WAS INJECTED IN AMOUNTS OF 3000-5000 CPM-G OF BODY WEIGHT. THE INCREASED CONSUMPTION OF ORGANISM WITH OXYGEN OR GLUCOSE STIMULATES METHIONINE S PRIME35 INCORPORATION INTO TUMOR PROTEINS EQUALLY. THIS EFFECT IS OF SELECTIVE NATURE IN TUMOR, BECAUSE OF STEADFASTNESS IN LABEL INCORPORATION INTO LIVER PROTEINS, AT THE SAME CONDITIONS. IT MAY BE CONCLUDED FROM THE DATA OBTAINED THAT IN THE BODY TUMORS EXIST IN THE STATE OF RELATIVELY GLUCOSE AND OXYGEN INSUFFICIENCY, AND MAY SPEND THE ADDITIONAL ENERGY FORMED BY STIMULATION OF GLYCOLISIS OF OXYDATION FOR PROTEIN BIOSYNTHESIS.

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

USSR

UDC 541.138

SHAPOTKOVSKIY, N. V., Moscow

"Current-Voltage Characteristics of a Hydrogen-Oxygen Fuel Cell and Its Dependence on the Drying Conditions"

Moscow, Elektrokhimiya, Vol 8, No 5, May 72, pp 682-686

Abstract: Hydrogen-oxygen fuel cell with porous gas diffusion electrodes is analyzed. The electrodes consist of an inactive base (a sealing layer) facing the electrolyte and an active layer facing the gas chamber. Mathematical equations have been derived for the hydrogen electrode, sealing layers, and electrolytic chamber, as well as for the voltage between the oxygen and hydrogen electrodes. The concentration of electrolyte in the active layer of hydrogen electrode has been plotted against the drying parameter k and current level. With increasing current the electrolyte becomes more diluted, but at sufficiently high k this change in concentration is very small and the concentration can be determined by $n^0_{H_2O}$. Other graphical representations showed that with decreasing k and constant current I the potential is lowered on the oxygen electrode. Lowering the drying process leads to a more dilute electrolyte which in turn results in higher ohm losses in the element.

1/1

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

JPRS 59873

23 August 1973

TECHNOLOGY OF PRODUCING NEW MATERIALS

Translation of Russian-language collection: Tekhnologiya Polucheniya Novykh Materialov, 1972, Kiev.

CONTENTS

PAGE

Emissitivity of Zirconium and Niobium Carbides in the Region of Homogeneity (L.N. Okhremchuk, G. Sh. Upadkhaya) 1

Work Function of Silicon Carbide (L.N. Okhremchuk) 4

Electrical Resistance of Composite Materials (Ye. M. Petrova) 8

Heat Capacity Measurement in Some Ceramic Materials (D.M. Karpinos, V.S. Klimenko) 14

Thermal Conductivity of Reinforced Plastics (D.M. Karpinos, V.S. Klimenko) 18

One Optimum Case of a Method of Axial Thermal Flow for Determining the Coefficient of Thermal Conductivity (V.S. Klimenko, et al.) 21

Study of Sintering Kinetics by Hot Extrusion of Zirconium and Titanium Carbides in the Regions of Their Homogeneity (V. Ya. Naumenko, R. Ya. Petrykina) 25

Hot Pressing Features of Molybdenum Carbide (Yu. I. Rogovoy, M.S. Koval'chenko) 32

[I - USSR - I]

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

Technology of Bonding in Industry

JPRS 59873
23 Aug 73

(14)

CONTENTS (Continued)

	Page
Production of Silicon Carbide Parts by Hot Casting Under Pressure (G.V. Trunov)	37
Production of Highly Dispersed Copper-Base Powder Composites Containing Refractory-Metal Carbides (V.I. Motyazhev)	42
Production of Yttrium Subgroup Rare-Earth Metal Dodecaborides (V.V. Odintsov)	48
Sintering Titanium Diboride-Molybdenum Compacts (O.V. Zaverukha)	53
Removal of the Plasticizer From Die-Extruded Hard-Alloy Parts (G. V. Plyushch)	59
Study of Solid-Phase Interaction of Molybdenum and Tungsten Disilicides With Ti and Zr in an Electron-Beam Heater (O.S. Yurchenko)	66
Effect of Alloying Elements on Shift of the Alpha-Beta-Transformation in Titanium and Zirconium (S.M. Braun)	71
Study of Some Properties of Zirconium With Additions of Transition Metals (V.F. Filippov)	75
Rare-Earth Metal Modification of Titanium (V.A. Kashchuk, A.I. Cherkashin)	84
Increasing the Physical and Mechanical Properties of Cermets (P.I. Chaplygin)	88
Effect of Scandium, Yttrium, and Lanthanum Oxides on the Properties of Nickel Ferrite (L.A. Alekseyuk)	95
Interaction of Transition Metal Carbides With Silicon (E.V. Kutysheva)	100
Fractionation of Fine Metallic Powders (A.F. Shapoval)	106

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

USSR UDC 616.831.9-002.15:616.831-002.151]-039.18-07

SHAPOVAL, A. N., Chair of Nervous Diseases, Perm' Medical Institute

"Serous Meningitis in Natural Foci of Tickborne Encephalitis"

Kiev, Vrachebnoye Delo, No 6, 1970, pp 135-139

Abstract: Immunological screening of cases recorded as tickborne encephalitis in Permskaya oblast was regularly conducted (198 cases during the last three years). The patients did not possess any antibodies to tickborne encephalitis virus and did not show increase in antibody titen. The disease was distributed over the entire oblast. The patients included 128 men and 70 women, ranging in age from 2 to more than 61 years. Illness due to serous meningitis as well as to tickborne encephalitis was observed in the spring and summer months of the year. In many cases, serous meningitis preceded the infestation with ticks (in 130 of 198 cases). In 20 cases, the illness could be attributed to the consumption of sour goat's milk, although illness within a family group was not always the case. In 45 patients, the source of the infection remained unknown. The length of the incubation period was similar in both diseases. The febrile period in the development of the disease was shorter for serous meningitis than for tickborne encephalitis. Other differences were found in the blood sedimentation rate, leukopenia, and leukocytosis. All observations made in connection with this study indicate that there are differences

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

USSR

SHAPOVAL, A. N., Vrachebnoye Delo, No 6, 1970, pp 135-139

between the two types of infection and that, although the clinical data are similar for both forms, a more detailed study should be made of these seasonal neuro-infections.

2/2

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

1/2 021 UNCLASSIFIED

TITLE--SEROUS MENINGITIDES IN NATURAL FOCI OF TICK BORNE ENCEPHALITIS -U- PROCESSING DATE--27NOV70

AUTHOR--SHAPOVAL, A.N.

COUNTRY OF INFO--USSR

SOURCE--VRACHEBNOYE DELO, 1970, NR 6, PP 135-139

DATE PUBLISHED--------70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES

TOPIC TAGS--MENINGITIS, CLINICAL MEDICINE, TICKBORNE ENCEPHALITIS

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3001/1022 STEP NO--UR/0475/70/000/006/0135/0139

CIRC ACCESSION NO--AP0126660

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

2/2 021

UNCLASSIFIED

CIRC ACCESSION NO--AP0126660 PROCESSING DATE--27NOV70

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. DESCRIBING THE CLINICAL COURSE OF SEROUS MININGITIDES OCURRING IN ENDEMIC FOCI OF TICK BORNE ENCEPHALITIS THE AUTHOR EMPHASIZES THE HETEROGENOUS ORIGIN OF THESE MENINGITIDES AND SUGGESTS THAT A THOROUGH STUDY OF ALL ASPECTS OF SEROUS MENINGITIDES IN NATURAL FOCI OF TICK BORNE ENCEPHALITIS IS OF MAJOR SIGNIFICANCE IN SOLUTION OF THE PROBLEM OF SEASONAL NEUROINFECTIONS. FACILITY: KAFEDRA NERVNYKH BOLEZNEY PERMSKOGO MEDITSINSKOGO INSTITUTE.

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

1/2 043

UNCLASSIFIED

TITLE--INFLUENCE OF THE ZIRCONIUM ADDITIONS ON THE RELAXATION SPECTRUM OF NICKEL -U-

PROCESSING DATE--20NOV70

AUTHOR-(04)-AZHAZHA, V.M., BONDARENKO, N.P., ZEYDLITS, M.P., SHAPOVAL, B.I.

COUNTRY OF INFO--USSR

SOURCE--FIZIKA METALLOV I METALLOVEDENIE, VOL. 29, FEB. 1970, P. 324-328

DATE PUBLISHED----FEB70

SUBJECT AREAS--MATERIALS

TOPIC TAGS--ZIRCONIUM CONTAINING ALLOY, NICKEL ALLOY, METAL INTERNAL FRICTION, HYDRIDE, METAL CREEP, SPECTRUM, VIBRATION DAMPING

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1995/0894

STEP NO--UR/0126/70/029/000/0324/0328

CIRC ACCESSION NO--AP0116404

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

2/2 043

UNCLASSIFIED

CIRC ACCESSION NO--AP0116404 PROCESSING DATE--20NOV70

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. STUDY OF THE EFFECT OF ZIRCONIUM ADDITIONS (UP TO 0.5PERCENT) ON THE BEHAVIOR OF INTERNAL FRICTION IN NICKEL SUBJECTED TO CREEP. IT IS FOUND THAT ZIRCONIUM CONTENTS OF 0.1 AND 0.3PERCENT INCREASE THE MAXIMA (ON THE RELAXATION SPECTRUM CURVE) THAT ARE DUE TO MAGNETOMECHANICAL DAMPING, GRAIN BOUNDARIES, AND BLOCK STRUCTURE, RESPECTIVELY. ZIRCONIUM CONTENT OF 0.5PERCENT DECREASES THESE MAXIMA. IT IS SUGGESTED THAT 0.3PERCENT ZR CORRESPONDS TO THE SOLUBILITY LIMIT OF ZR IN NI. THE PEAK DETECTED ON THE CURVE OF INTERNAL FRICTION IS SUGGESTED TO BE DUE TO THE PRECIPITATION OF ZIRCONIUM HYDRIDE.

FACILITY: AKADEMIIA NAUK UKRAINSKOI SSR.

FACILITY: FIZIKO TEKHNICHESKII INSTITUT, KHARKOV, UKRAINIAN SSR.

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

USSR

UDC 543.253+541.138.3

PEN'KOVSKIY, V. V., YEGOROV, Yu. P., and SHAPOVAL, G. S., Institute of Organic Chemistry, Acad. Sc. Ukrainian SSR

"Electrochemical Reduction of Phosphazoarenes in Dimethylformamide"

Leningrad, Zhurnal Obshchey Khimii, Vol 41 (103), No 4, Apr 71, pp 738-742

Abstract: Electrochemical reduction of phosphazo compounds is a stepwise process, characterized by several polarographic waves. The first stage of the electrochemical reduction of triphenylphosphazoarenes in dimethylformamide consists of the formation of anion free radicals. The first functional group to be reduced, when it is present in the molecule, is the nitro group; next the P:N bond is reduced, the reaction occurring irreversibly. When phosphazosulfinyl compounds are studied, the first to be reduced after the nitro group is the S:O bond. The electron effect of the triphenylphosphazo or the sulfinyl groups may be affecting the behavior of the nitro group in ortho- or meta- position with respect to the second substituent during the electrochemical reduction.

1/1

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

Acc. Nr: AP0049662 Abstracting Service: CHEMICAL ABST. 5/70 Ref. Code: 4R0079

960412 Polarographic study of aliphatic diisocyanates. Shapoval, G. S.; Lipatova, T. E.; Zhabenko, V. A.; Sheinina, L. S.; Morozov, M. A.; Lagutin, M. A. (Inst. Khim. Vysokomol. Soedin., Kiev, USSR). *Zh. Obshch. Khim.* 1970, 40(1), 25–8 (Russ). Polarographic data were reported for $(CH_2)_n(NCO)_2$ with n = 4, 6, 7, 8, 9, 10. The half-wave potential showed a relation to the above structure by gradual extinction of the mutual inductive effect of the NCO groups as the value of n increased. These potential values were indicative of the overall reactivity of the diisocyanates in such reactions as polyurethane formation and hence represent useful industrial value. The following half-wave potentials were reported (n, V given): 4, 1.93; 5, 2.12; 6, 2.18; 7, 2.23; 8, 2.235; 9, 2.24; and 10, 2.25. The measurements were made relative to the Hg anode by using $AcNMe_2$ solvent and Et_4NI electrode at 25°. G. M. Kosolapoff

1/1

I B

REEL/FRAME 19801561

7

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

USSR

UDC 612.828;612.178 5

GENIS, E. D., DUKHIN, E. O., FOYA, N. M., and SHAPOVAL, L. M., Institute of Physiology imeni O. O. Bogomolets, Academy of Sciences, Ukrainian SSR

"Histochemical Changes in Neurons of the Bulbar Cardiovascular Center After Exclusion of the Baroreceptors of the Sino-Aortic Reflexogenic Zone"

Kiev, Fiziologichniy Zhurnal, No 6, 1970, pp 784-788

Abstract: Denervation of the sinocarotid and aortic reflexogenic zones in rabbits resulted in the development of stable hypertension. Histochemical study of the RNA content and succinic dehydrogenase activity in neurons of the medulla oblongata cardiovascular center revealed areas with significant changes in the above indices. The medial, lateral, and giant-cell nuclei of the reticular formation showed some increase in the number of activated neurons, which produce and utilize RNA, intensification of satellitosis, and large number of structures with high succinate dehydrogenase activity. No such changes were detected in other nuclei investigated (dorsal nucleus of the vagus, region of the tractus solitarius, and nucleus ambiguus).

1/1

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

1/2 016

UNCLASSIFIED

TITLE--PRODUCTS OF THE ELECTROLYTIC DECOMPOSITION OF FUSED CARBONATES -U-

PROCESSING DATE--23OCT70

AUTHOR-(04)-DELIMARSKIY, YU.K., GRISHCHENKO, V.F., TUMANOVA, N.KH., SHAPOVAL, V.I.

COUNTRY OF INFO--USSR

SOURCE--UKR. KHIM. ZN. 1970, 36(2), 136-41

DATE PUBLISHED-------70

SUBJECT AREAS--CHEMISTRY

TOPIC TAGS--ELECTROLYSIS, CARBONATE, FUSED SALT, ALKALI METAL, EUTECTIC, CHEMICAL DECOMPOSITION, ELECTROLYTIC DECOMPOSITION

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1996/1932

STEP NO--UR/0073/70/036/002/0136/0141

CIRC ACCESSION NO--AP0118894

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

2/2 016

UNCLASSIFIED

CIRC ACCESSION NO--AP0118894 PROCESSING DATE--23OCT70

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. NO C IS FORMED AT THE CATHODE IF AN ELECTROLYTE CONTG. 50PERCENT EQUIMOLAR K SUB2 CO SUB3-NA SUB2 CO SUB3 MIXT. IN KCL IS USED AT 700DEGREES. IF TO THE SOLN., 9 PERCENT LI SUB2 CO SUB3 IS ADDED THE CURRENT EFFICIENCY OF C BECOMES 92.8PERCENT AND IN LI SUB2 CO SUB3-K SUB2 CO SUB3 EUTETIC AT A C.D. OF 1 A-CM PRIME2, THE EFFICIENCY OF C IS 100PERCENT AT 450DEGREES, FALLING WITH TEMP. AND C.D. INCREASE DUE TO FORMATION OF ALKALI METAL. ADDN. OF CO SUB2 TO THE SOLN. HAS LITTLE EFFECT ON C FORMATION. ADDN. OF 3PERCENT KOH MARKEDLY REDUCES IT. THERE IS A DECREASE IN C EFFICIENCY WITH ADDN. OF 25-50PERCENT KF. THE FORMATION OF C IS ATTRIBUTED TO THE PRESENCE OF CO SUB2 IN THE ELECTROLYTE AND THE EFFECT OF LI SUB2 CO SUB3 ON THE EASE OF ITS DECOMPN. NO FORMATION OF CO WAS OBSERVED. AT THE ANODE, CO SUB2-O SUB2 MIXTS. ARE FORMED; THE MAX. CO SUB2 :O SUB2 RATIO WAS OBTAINED AT 840DEGREES IN K SUB2 CO SUB3-NA SUB2 CO SUB3 MIXT. (2.35:1.0). IN LI SUB2 CO SUB3-K SUB2 CO SUB3 AT 600DEGREES, THE RATIO WAS 1.0:1.17. THIS IS BELIEVED TO BE LARGELY DUE TO THE INCREASED EASE OF DISCHARGE OF CO SUB3 PRIME2 NEGATIVE AT THE HIGHER TEMP. FACILITY: INST. OBSHCH. NEORG. KHIM., KIEV, USSR.

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

USSR

LEVITSKIY, S. M.; SHAPOVAL, V. Z. (Kiev State University)

"Damping of Oscillations in a Beam-Plasma System during Modulation by a Low-Frequency Signal"

Kiev, Ukrainskiy Fizicheskiy Zhurnal; May, 1972; pp 796-802

ABSTRACT: It is shown experimentally that velocity modulation of an electron beam by a monochromatic signal with a frequency of 10-20 cps results in a one-two-order decrease in integral power of oscillations existing in a beam-plasma system within a frequency range of 10^5-10^{10} cps. In this case energy losses of the beam decrease, and it passes through the plasma almost unscattered. The authors investigate the dependence of oscillation damping on the beam and plasma modes, amplitude and frequency of the modulating signal, and type of gas.

The hypothesis is advanced that the indicated damping effect takes place because of the fact that the parameters of a beam-plasma system suffer perturbation, with a period commensurate with the characteristic time of the build-up of natural oscillations in the system. In this case the conditions for the build-up of oscillations are disturbed and their level decreases.

1/1

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

Acc. Nr: AP0049055

Ref. Code: UR0357

PRIMARY SOURCE: Vestnik Oftal'mologii, 1970, Nr 1, pp 88-89

A RARE CASE OF A FOREIGN BODY IN THE ORBIT AND THE HIGHMORE SINUS

M. A. Penkov, YE. Z. Shapoval, A. M. Shkil'

Summary

The authors report a case of combined lesion of the orbit and the Highmore sinus with the presence of a big foreign body (a metal nail with a head measuring 5×0.5 cm). Such wounds are of unfrequent occurrence. The post-operative period proceeded smothly ending with complete recovery of the patient.

1/1

REEL/FRAME
19800841

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

1/2 020 UNCLASSIFIED PROCESSING DATE--18SEP70

TITLE--STANDARDIZATION IN TEACHING PROCEDURE AND IN PREPARATION OF YEARLY AND DIPLOMA DESIGN PROJECTS -U-

AUTHOR-(03)-SHAPOVALENKO, A.M., KHUTSIYEV, A.I., DMITRIYEV, M.M.

COUNTRY OF INFO--USSR

S

SOURCE--STANDARTY I KACHESTVO, 1970, NR 2, PP 52-54

DATE PUBLISHED--------70

SUBJECT AREAS--BEHAVIORAL AND SOCIAL SCIENCES

TOPIC TAGS--DESIGN STANDARD, TEACHING PROCEDURE, ADVANCED EDUCATION QUALITY, DIPLOMA PROJECT, R AND D EFFECTIVENESS

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1985/0328 STEP NO--UR/0422/70/000/002/0052/0054

CIRC ACCESSION NO--AP0100815

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

272 020

CIRC ACCESSION NO--AP0100815 UNCLASSIFIED

PROCESSING DATE--18SEP70

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE SPECIALISTS GRADUATED FROM THE HIGHER SCHOOL SHOULD BE PREPARED BETTER, THE AUTHORS THINK. IT IS SUGGESTED THAT ALL THE INSTITUTES TEACH A COURSE OF FUNDAMENTALS OF STANDARDIZATION. ALL TYPES OF STUDENTS' WORKS SHOULD BE FORMULATED TO CERTAIN DESIGN STANDARDS WHICH REQUIRE WORKING OUT AND INTRODUCTION IN PRACTICE AT THE INSTITUTES.

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

USSR

UDC 669.187.6

NIKULIN, A. A., ARTEM'YEV, V. D., VOLKHONSKIY, L. A., KLYUYEV, M. M., TOPILIN, V. V., VOLKOV, S. YE., and SHARAPOV, A. A.

"Study of Methods of Acting on Processes of Crystallization of Ingots During Electric Slag Remelting"

Proizvodstvo Chernykh Metallov (Production of Ferrous Metals -- Collection of Works), No 75, Metallurgiya Press, 1970, pp 161-167

Translation: Results are presented from a study of the control of crystallization of an ingot by acting on the drop transfer and hydrodynamic processes in the slag and metal bath by two methods, performed on a laboratory electric slag installation. The methods are remelting of electrodes moving eccentrically relative to the axis of the crystallizer, and remelting of electrodes in a longitudinal constant magnetic field, created by a solenoid wound around the cover of the crystallizer and supplied by a controlled direct current source. 3 figures; 2 tables; 5 biblio. refs.

1/1

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-

UDC 632.9

USSR

SVISHCHUK, A. A., BASALKEVICH, Ye. D., VYSOTSKIY, N. N., SHAPOVALENKO, V. F.

"Insecticidal Properties of Methylated Quinones, Hydroquinones and 6-oxychroman Derivatives"

Fiziol. aktivn. veshchestva. Resp. mezhved. sb. (Physiologically Active Substances. Republic Interdepartmental Collection), 1972, No 4, pp 85-87 (from RZh-Khimiya, No 2 (II), Feb 73, Abstract No 2N471)

Translation: Results are presented from tests under laboratory conditions run on greenbug, red spider mites, rice weevils and flies using methylated hydroquinones, their products of condensation with tertiary isoprenoidal carbinols and the products of their oxidation. Against greenbugs, 2,5,6-Me_3-1,4-$(HO)2C_6H$ (contact effect) and 2,5-Me_2-1,4-$(HO)_2C_6H_2$ (systemic effect) and 2,5-dimethylbenzoquinone, 5-methyltocol have an expressed selective effect. The given compounds do not have phytotoxicity. The results of the study indicate the possibility of the occurrence of natural self-protection of grass crops against their pests.

1/1

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

1/2 020 UNCLASSIFIED PROCESSING DATE--20NOV70

TITLE--PRESYNAPTIC CONTROL OF SPINAL MOTONEURONS FROM DIFFERENT LEVELS OF THE BRAIN -U-

AUTHOR--SHAPOVALOV, A.I.

COUNTRY OF INFO--USSR

SOURCE--NEYROFIZIOLOGIYA, 1970, VOL 2, NR 2, PP 203-215

DATE PUBLISHED--------70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES

TOPIC TAGS--BRAIN, SPINAL CORD, DENDRITE NEURON, ELECTROPHYSIOLOGY

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3009/1984 STEP NO--UR/0660/70/002/002/0203/0215

CIRC ACCESSION NO--AP0134420

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

2/2 020 UNCLASSIFIED PROCESSING DATE--20NOV70

CIRC ACCESSION NO--AP0133420

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. IT WAS FOUND BY INTRACELLULAR RECORDING FROM LUMBAR MOTONEURONS OF CAT AND MONKEY THAT MONOSYNAPTIC RETICULO MOTONEURONAL, VESTIBULO MOTONEURONAL, RUBRO MOTONEURONAL AND CORTICO MOTONEURONAL ACTIONS HAVE COMMON BASIC PROPERTIES: 1) THEY ARE EVOKED BY FAST CONDUCTING FIBRES RUNNING IN DESCENDING TRACTS. 2) THEY DO NOT REACH CRITICAL LEVEL FOR SPIKE GENERATION, 3) THEIR SYNAPTIC INPUTS ARE LOCATED ON DENDRITIC PORTION OF MOTONEURONAL MEMBRANE. RESULTS OBTAINED ON PETROMYZONS AND ALBINO RATS DEMONSTRATE THAT RETICULO MOTONEURONAL MONOSYNAPTIC PROJECTIONS APPEARED IN THE LOWER VERTEBRATES IN THE EVOLUTIONARY SCALE AND ARE POWERFUL IN MAMMALS. INVESTIGATION OF SUPRASPINAL ACTIONS IN ONTOGENESIS CONFIRMS EARLY DEVELOPMENT OF DIRECT BRAIN STEMSPINAL PATHWAYS. AVAILABLE EVIDENCE DEMONSTRATE THAT CEREBRO MOTONEURONAL MONOSYNAPTIC CONNECTIONS PROVIDE IMPORTANT COMPONENT OF SUPRASPINAL CONTROL. THE FUNCTIONAL ROLE OF MONOSYNAPTIC CONNECTIONS IS HIGHLY DEPENDENT ON INTERACTION WITH OTHER SYNAPTIC INPUTS TO MOTONEURONES. FACILITY: THE I. M. SECHENOV INSTITUTE OF EVOLUTIONARY PHYSIOLOGY AND BIOCHEMISTRY, LENINGRAD.

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

USSR

UDC 624.074.001.24+539

GAVRISH, V. S., SHAPOVALOV, A. P., TAMUROV, N. G., TANTSURA, V. YA.,
Zaporozh'ye Affiliate of Dnepropetrovsk Metallurgical Institute

"Study of the Stability of Cylindrical Shells Weakened by Circular Openings Beyond the Elasticity Limit"

Kiev, Prikladnaya mekhanika, No. 11, Nov 71, pp 105-109

Abstract: A series of experiments on shells fabricated with high precision was conducted to determine the effect of circular cuts on the stability of cylindrical shells under axial compression. The radii of the openings, the number of openings, and their mutual position were varied in the samples tested. The samples were fabricated of thin-walled tubes obtained by high-precision rolling on a special mill. The tube material was heat-resistant steel with a diameter of 46 mm, an average radius of 22.8 mm, a wall thickness of 0.4 mm, and a length of 135 mm. A total of 200 shells were tested to obtain values of the critical forces. The critical force for shells with constant dimensionless parameters was determined on no less than three samples. The spread in the values of the experimental critical forces fluctuated within a 3% range, indicating the careful preparation of the experiments. Three values of the experimental critical

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

USSR

GAVRISH, V. S., et al, Prikladnaya mekhanika, No. 11, Nov 71, pp 105-109

experimental forces were determined: T_c, the lower value corresponding to the moment of the appearance of plastic reduction at the contour of the opening in the zone of maximum perturbation of the compressing stresses; P_k, the upper value corresponding to the beginning of the development of plastic deformation over the entire weakened cross section (the growth in radial and longitudinal displacements without an increase in load); and P_0, the upper value of the critical forces without the weakening opening. In the shells tested, $P_0 = 1.4 \cdot 10^4$ n. The parameter $\omega = \rho^2/R\delta$ was used to evaluate the effect of weakening openings on shell stability, where ρ is the radius of the weakening opening, R is the radius of the shell, and δ is the wall thickness. It was shown that the appearance of plastic folding at the edge of the opening for a shell with $\omega < 1$ coincides in time with the appearance of plastic waves over the generatrix in the unweakened zones of the cell. A comparison of critical forces obtained experimentally for unweakened shells and shells weakened by small openings showed that they are practically the same (differing by no more than 4%) and therefore one can assume that $P_0 = P_k = P_c$ for the characteristic $\omega < 1$. For shells with $\omega > 1$, a loss in stability is of a local character and also begins at the edges of the openings coinciding with the zones of maximum compressing forces. It can be concluded that for $h/\rho > 3.5$, where h is the distance between openings and the openings are on the same side with a constant value of ω and h and symmetry over the height of the shell that displacements of the first pair of openings and the value of the critical force for any number of openings will be the same as for shells weakened by two openings.

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"

"APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8

UNCLASSIFIED PROCESSING DATE--09OCT70

2/2 023

CIRC ACCESSION NO--AP0115893

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE REFINING ABILITY OF THE PROTECTIVE MEDIA USED IN HIGH TEMP. THERMAL TREATMENT WAS STUDIED AND ALSO THEIR EFFECT ON THE STRUCTURE AND MAGNETIC PROPERTIES OF TRANSFORMER STEEL. THE INVESTIGATED MEDIA WERE VACUUM IN THE RANGE 10 PRIME NEGATIVE3 MINUS 30 TORR, H, H AFTER PURGING WITH N 95PERCENT-H 5PERCENT, AND N 95PERCENT-H 5PERCENT. FOR THE ACHIEVEMENT OF GOOD MAGNETIC PROPERTIES THE THERMAL TREATMENT SHOULD BE CARRIED OUT AT A PRESSURE SMALLER THAN 10 PRIME NEGATIVE3 TORR. FACILITY: TSNIICHM IM. BARDINA, MOSCOW, USSR.

UNCLASSIFIED

APPROVED FOR RELEASE: 07/20/2001 CIA-RDP86-00513R002202910007-8"