"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

1/2 019 UNCLASSIFIED PROCESSING DATE--04DEC70

TITLE--FORMATION OF COMPLEXES OF SCANDIUM WITH THIOCYANATE IONS IN AQUEOUS SOLUTIONS -U-

AUTHOR-(04)-SAS, T.M., GAGARINA, V.A., KOMISSAROVA, L.N., GULIA, V.G.

COUNTRY OF INFO--USSR

SOURCE--ZH. NEORG. KHIM. 1970, 15(5), 1255-60

DATE PUBLISHED--------70

SUBJECT AREAS--CHEMISTRY

TOPIC TAGS--COMPLEX COMPOUND, SCANDIUM COMPOUND, THIOCYANATE, POTENTIOMETRIC TITRATION, SPECTROPHOTOMETRY, IONIC BONDING

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3007/0741 STEP NO--UR/0078/70/015/005/1255/1260

CIRC ACCESSION NO--AP0136180

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

2/2 019

UNCLASSIFIED

CIRC ACCESSION NO--AP0136180 PROCESSING DATE--04DEC70

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. FORMATION OF SC(NCS) SUBN PRIME(3-N) POSITIVE IN AQ. SOLN. WAS STUDIED BY POTENTIOMETRY, SPECTROPHOTOMETRY, AND EXTN. (SC-NCS) PRIME2 POSITIVE IS THE MOST STABLE WITH STABILITY CONSTS. OF 0.54 AND 1.35 TIMES 10 PRIME NEGATIVE2 AT IONIC STRENGTH 1 AND 0.1, RESP.

FACILITY: MOSK. GOS. UNIV. IM. LOMONOSOVA, MOSCOW, USSR.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR

UDC: 621.378.9:533.9.02

YAMANAKA, S., YAMANAKA, T., KANG, H., SASAKI, T., YOSHIDA, K., UEDA, K., HONGYO, M., WAKI, M., Electrical Engineering Department, Osaka University, Institute of Plasma Physics, Nagoya University, Japan

"Plasma Generation and Heating by Lasers"

Moscow, Kvantovaya Elektronika, Sbornik Statey, No 2(8), 1972, pp 45-52

Abstract: The paper gives the results of research on destruction of laser glasses by powerful radiative emission, on using liquid lasers as light amplifiers, and also on using powerful lasers for heating a plasma. A method is proposed for high-speed measurements of plasma temperature and density based on the Thomson scattering of light. A complex structure is detected in the central ion peak in the scattered radiation spectrum. The recording equipment shows twenty neutrons occurring in a burst. [The paper is an abbreviated version of an article presented to the editors by the organizational committee of the International

1/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR

YAMANAKA, S. et al., Kvantovaya Elektronika, Sbornik Statey, No 2(8), 1972, pp 45-52

Conference on Laser-Produced Plasma held in Moscow in 1970. Translation by V. A. Gribkov]. Six illustrations, bibliography of ten titles.

2/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR UDC: 537.226+537.311.33]:[537+535

LEVITAS, I. S., POZHELA, Yu. K., and SASHCHUK, A. P.

"Galvanomagnetic Recombination Effect in Alternating Electric and Magnetic Fields"

Vil'nyus, Litovskiy Fizicheskiy Sbornik, No 5, 1972, pp 825-834

Abstract: The galvanomagnetic recombination effect is defined as the phenomenon occurring in semiconductors with both signs of current carrier when there is a loss of equilibrium of current carriers in a magnetic field due to the different velocities of surface recombination in facing boundaries. A table is given for assistance in the computation of the electric and magnetic fields and for the transformation of alternating into direct signals as applied to certain particular cases, without taking the phase shift into account. The authors also measured some characteristics of sensors of the galvanomagnetic recombination effect in alternating magnetic and electric fields at frequencies less than the critical value; results of the measurements are given in the form of curves. One of the functions of this article is to indicate the broad possibilities of using sensors of the effect for measuring magnetic fields in linear signal multiplication circuits.

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR

RUDAYA, K.I., SASHKO, N.A., TRUSOV, G.G.

UDC 621.314.57

"System For Control Of Thyristors Of Diesel Locomotive Inverter Units"

Elektr. i teplovozn. tyaga (Electrical And Diesel Locomotive Traction), 1970, No 12, pp 23-24 (from RZh--Elektronika i yeye primeneniye, No 4, April 1971, Abstract No 4B666)

Translation: The paper describes a circuit for control of a thyristorized unit with a large number of series-connected elements (80 pieces in the channel). A phase-shifting device operates in accordance with the vertical principle with a sawtooth synchronizing voltage. The pulse shaper uses a Schmitt trigger. The output stage of the pulse generators for control of a group of power thyristors is fulfilled by an auxiliary thyristor. The circuit passed bench tests and was checked in a 3-phase dependent bridge inverter. The range of variation of the control angle is 0--220°. The precision of synchronization does not depend on the oscillations of the network, and the temperature limits are from minus 50 to plus 70° C. 3 ill. I.R.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR

SASIN, V. YA., et al., Dokl. nauchno-tekhn. konferentsii po itogam nauchno-issled. rabot za 1968-1969 gg. Sekts. Promteploenergetiki. Podsekts. Sushil'n i teploobmen ustroistv, 1970, pp 79-84 (from RZh-Teploenergetika, No 5, May 70, Abstract No 5G103.

applied. Under stable boiling conditions, without drying or superheating, of the conductor surface, a substantial heat flux can be obtained by separating the grid from the surface a distance on the order of the grid mesh. Studies were also made on heat exchange possibilities of thermal tubes in various working media, and using a wide range of temperatures, geometries, tube and grid characteristics. Four figures.

A. A. Salamov

2/2

USSR UDC 536.27.001.5

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

SASIN, V. YA., FEDOROV, V. N., and SOROKIN, A. YA.

"Experimental Study of Thermal Tubing in Low Boiling Point Heat Exchangers"

Dokl. nauchno-tekhn. konferentsii po itogam nauchno-issled. rabot za 1968-1969 gg. Sekts. Promteploenergetiki. Podsekts. Sushil'n i teploobmen. ustroistv (Reports of the Scientific-Technical Conference on Summaries of Scientific Research Work for 1968-1969. Industrial Thermal Engineering Section, Subsection on Desiccating and Heat Transfer Devices), Moscow Power Engineering Institute, 1970, pp 79-84 (from RZh-Teploenergetika, No 5, May 70, Abstract No 5G103, by A. A. Salamov).

Translation: To determine maximum thermal flux during boiling, with respect to liquid type, geometry of the porous structure, and area of the heat conductors and their surroundings, studies were made on liquid evaporation from porous grid elements. Tests were run in a vacuum chamber using planar heater elements with various grid combinations

1/2

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR

DISHOVSKIY, Kh. D., KAGAN, Yu. S., KOVTUN, S. D., KOKSHAREVA, N. V., TODIONOV, G. O., and SASINOVICH, L. M., Division of Experimental Toxicology, All-Union Institute of the Hygiene and Toxicology of Pesticides, Polymers, and Plastics

UDC 612.014.3

(2)

"The Physiological Mechanism of the Action of Dipyroxime"

Kiev, Fiziologichniy Zhurnal, Vol 19, No 3, May/Jun 73, pp 310-314

Abstract: Therapeutic administration of dipyroxime to rats poisoned with the insecticides DDVP (0,0-dimethyl-2,2-dichlorovinyl phosphate) and chlorophos resulted in a partial reactivation of cholinesterase in the brain, spinal cord, and striated muscles, as shown by histochemical data. Cytophotometric studies showed that the reactivation of cholinesterase under the effect of dipyroxime in the brain of animals poisoned with DDVO was most pronounced in the caudate nucleus - putamen complex. Electromyographic investigation indicated a beneficial effect of dipyroxime on the transmission of impulses in nerve-muscle synapses. The results of the study of the physiological action of dipyroxime substantiated the conclusion arrived at in earlier work that this drug is effective in the treatment of poisonings with DDVP and chlorophos (cf. Kagan et al, Farmakol. i Toksikol., 3, 359, 1971).

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR

UDC 613.63:632.95

KAGAN, YU. S., SASINOVICH, L. M. and OVSEYENKO, G. I.; Institute of the Hygiene and Toxicology of Pesticides, Polymers and Plastics

"Use of Correlation Analysis of Toxicity and Cumulation Indices to Establish Hygiene Standards for Pesticides in the Air of Working Areas (with Use of Computers)"

Moscow, Gigiyena Truda i Professional'nyye Zabolevaniya, No 8, 72, pp 21-25

Abstract: Attempts to derive a straightforward computational scheme to predict maximum possible concentrations (MPC) of new chemicals (pesticides, etc.) date back more than a dozen years, but the limited availability of toxicity data has prevented any significant success in this area. Known toxicity-index figures for thirty industrial chemicals were processed using computer techniques. Five regression equations, linking MPC with each toxicity index (LD_{50}, Lim_{chr}, Lim_{ac}, etc.), then were set up theoretical (calculated) and empirical MPC values were compared. In more than two-thirds of cases there was complete or approximate coincidence of the two values; in the remainder there was some degree of discrepancy, depending on the particular index used (notably in the case of DDT and PDK-5 preparations). As a whole, the predictions were highly accurate. With judicious application and due allowance for physico-chemical anomalies in some cases, the system can be used to obtain reliable MPC

1/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR

KAGAN, YU. S., et al., Gigiyena Truda i Professional'nyye Zabolevaniya, No 8, 72, pp 21-25

values for any new chemical, thus eliminating lengthy and expensive experimental work. Computation is reduced to a minimum, since nomograms are used instead of equations.

2/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR

UDC 615.917:547.1'118].085.356:577.153.9.024

KAGAN, Yu. S., SASINOVICH, L. M., and DANILENKO, L. P., Laboratory of General Toxicology, All-Union Scientific Research Institute of Hygiene and Toxicology of Pesticides, Polymer and Plastic Substances, Kiev

"Comparative Evaluation of the Therapeutic Effect of Dipyroxime in Poisoning of the Experimental Animals With Some Organophosphorus Compounds"

Moscow, Farmakologiya i Toksikologiya, Vol 34, No 3, May-Jun 71, pp 359-362

Abstract: Dipyroxime, a cholinesterase reactivator, and an analog of TMB-4, exhibited definite therapeutic effect in rats, mice and cats poisoned with organophosphorus insecticides: chlorophos, DDVF, and phthalophos (0,0-dimethyl S-phthalimidomethyl dithiophosphate). Dipyroxime used in combination with atropine was more effective than either compound alone, except in the case of chlorophos, where atrophine and dipyroxime individually had higher, nearly equal results. The combined drugs were more effective in treating cats and rats than mice. Both compounds were most effective in counteracting DDVR poisoning, less so with phthalophos, and least effective with chlorophos poisoning. Dipyroxime reactivates the cholinesterase in erythrocytes, serum and in liver of the test animals. The return to normal of the enzyme activity in brain is less dramatic.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

Analysis and Testing

USSR

UDC 669.1.541.015

LASHKO, N. F., SASLAVSKAYA, L. V., KOZLOVA, M. N., MOROZOVA, G. I., SOROKINA, K. P., KHAKHLOVA, N. V., and YAKOVLEVA, YE. F.

"Physical and Chemical Methods of Phase Analysis of Steels and Alloys"

Fiziko-Khimicheskiye Metody Fazovogo Analiza Staley i Splavov (English version above), Moscow, Metallurgiya Press, 1970, 476 pages

Translation of Annotation: Methods of combined physical and chemical phase analysis are systematized and summarized, including methods of phase separation and their chemical and x-ray structural analysis.

Problems of the theory of electrochemical separation of phases, the principles of selection of electrolytes, and methods of phase analysis are analyzed as applicable to various steels and alloys.

The book is designed for scientific workers of scientific research institutes and plant laboratories involved in the development of steels and alloys, as well as the study of their properties depending on their phase composition.

99 figs, 100 tables, 708 biblio refs.

1/6

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR

LASJKO, N. F., et al., Fiziko-Khimicheskiye Metody Fazovogo Analiza Staley i Splavov, Metallurgiya Press, 1970, 476 pages.

TABLE OF CONTENTS

Foreword	. . . . .	5
Chapter 1.	Basic Principles of the Theory of Phase Separation of Multiphase Alloys in Electrolytes	9
Chapter 2.	Basic Principles of the Theory of Phase Separation of Multiphase Alloys in Electrolytes	21
Chapter 3.	Methods of Electrochemical Phase Separation of Alloys in Electrolytes	51
	Apparatus for Electrochemical Separation of Phases in Electrolytes	52
	Galvanostatic and Potentiostatic Methods of Measuring Anode Polarization Curves	64
	Differentiation (Selective Etching) of Phases of Multiphase Alloys	68
	Methods of Separation of Phases and Phase Analysis of Steels without Weighing of Specimens (Parts) and Isolated Upsetting	78

2/6

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR

LASHKO, N. F., et al., Fiziko-Khimicheskiye Metody Fazovogo Analiza Staley i Splavov, Metallurgiya Press, 1970, 476 pages.

Methods of Determining Chemical Composition and Number of Phases of Alloy Following Their Separation 84
Methods of Testing Reliability and Accuracy of Physical and Chemical Phase Analysis 92
Chapter 4. Diffraction Methods of Phase Analysis 100
Chapter 5. Primary Types of Chemical Compounds in Alloys Based on Various Metals 112
Chapter 6. Phase Analysis of Alloys Based on Iron 144
Primary Problems of Isolation of Carbides from Carbon and Alloy Steels 146
Dispersion of Grains and Structures of Steels 161
Isolation and Specific Features of Residual Austenite 163
Isolation of Ferrite from Autenitic-Ferritic Steels . 168
Determination of Phase Composition and Distribution of Alloying Elements in Austenitic Heat-Resistant Steels in the System Fe-Cr-Mn-Ni-V-Nb-Mo-W, Containing $Me_{23}C_6$ and MeC Carbides 175
Cast Irons and Graphitizing Steels 177

3/6

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR

LASHKO, N. F., et al., Fiziko-Khimicheskiye Metody Fazovogo Analiza Staley i Splavov, Metallurgiya Press, 1970, 476 pages.

Certain Specifics of Isolation of Phases from Beryllium-Containing Heat-Resistant Steels . . . 182

Methods of Isolation of σ-phases from Steels and Iron-Based Alloys . . . 184

Isolation of Fe_2W Phases from Steels . . . 190

Isolation of Phases of the Structural Type α-Mn (χ-phase) from Steels . . . 193

Isolation and Analysis of Z-phase from Nitrogen-Containing Chrome Niobium Steels . . . 196

Phase Analysis of Chrome-Nickel-Titanium Steels with Basic Hardening of Phases β-Ni3Ti or Ni3(Ti, Al) . . . 198

Certain Methods of Isolation of Carbides from Steels with Stable Potentials . . . 209

Chapter 7. Methods of Separation of Phases of Anode Precipitate . . . 221

Chapter 8. Prevention and Elimination of Products of Secondary Reactions in Electrolytes . . . 240

4/6

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR

LASHKO, N. F., et al., Fiziko-Khimicheskiye Metody Fazovogo Analiza Staley i Splavov, Metallurgiya Press, 1970, 476 pages

Chapter 9. Methods of Determining Various Forms of Carbon in Steels and Alloys 254

Chapter 10. Methods of Phase Analysis of Nickel Steels 278

Methods of Phase Analysis of Nickel Steels Hardened by γ′ Phases Based on Ni3Al and Ni3(Al, Ti) 286

Methods of Isolation of Carbide and Boride Phases 312

Methods of Isolation of σ and μ Phases 320

Methods of Phase Analysis of Alloys Hardened with Intermetallic Phases Based on Ni3Nb, Ni3Ti, and Ni3Ta 328

Methods of Isolation of Phases and Alloys Based on Ni-Be 342

Methods of Isolation of Phases from Corrosion-Resistant Nickel Alloys in the Systems Ni-Mo, Ni-Mo-Cr, Ni-Mo-Cr-Fe 344

Chapter 11. Methods of Phase Analysis of Copper-Nickel Alloys 348

Chapter 12. Methods of Phase Analysis of Titanium Alloys 355

Chapter 13. Methods of Phase Analysis of Magnesium Alloys 365

5/6

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR

LASHKO, N. F., et al., Fiziko-Khimicheskiye Metody Fazovogo Analiza Staley i Splavov, Metallurgiya Press, 1970, 476 pages

Chapter 14.	Methods of Phase Analysis of Aluminum Alloys	396
Chapter 15.	Methods of Phase Analysis of Refractory Alloys	407
	Methods of Phase Analysis of Molybdenum Alloys	419
	Methods of Phase Analysis of Niobium Alloys	425
Chapter 16.	Methods of Isolation of Phases from Powder Materials	425
Chapter 17.	Methods of Layer-by-Layer Physical and Chemical Phase Analysis	431

6/6

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR

UDC: 624.012:539.4

GABRUSENKO, V.V. and SASONKO, L.V.

"Reinforced Concrete Structures With Transversally Bent Prestressed Bars"

Novosibirsk, Sb. Nanch.-Tekhn. Konf. Posvyashch. 50-letiyu SSSR (Symposium of Scientific-Technical Conference on 50th Anniversary of USSR), Novosibirsk Institute of Railroad Engineers,1972, p 253 (from Referativnyy Zhurnal-Mekhanika, 1973, Abstract No 2V877)

Translation: Reduction of weight and increase of reliability of concrete structure with heat reinforcing bars can be achieved by two-directional prestressing of support sections. The use of bent prestressed bars in 3x12 m covering slabs reduces by 50% the principal tension stresses, as shown by computer calculations, makes it possible to eliminate the upper layer of bars and reduce the amount of concrete in support sections. The amount of steel is reduced by 11-20%, concrete by 8-10%, total cost reduction 6-11%. With gable beams of 18 to 24 m span, it is possible to either use partial bending, reducing the amount of bars by 18%, or to bend all bars and recess the concrete, reducing the cost by 9.7%.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR UDC: 8.74

SASOROVA, Ye. V.

"A Follow Scanning Algorithm and its Program Realization"

V sb. Raboty po tekhn. kibernet. (Papers on Technical Cybernetics--collection of works), vyp. 4, Moscow, Computing Center of the Academy of Sciences of the USSR, 1971, pp 108-118 (from RZh-Kibernetika, No 4, Apr 72, Abstract No 4V571)

[no abstract]

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR

UDC 621.376

MAGDICH, L.N., SAFRONOV, O.I., SASOV, V.N.

"Microwave Modulation Of Infrared Radiation"

Kvantovaya elektronika (Quantum Electronics), Moscow, No (12), 1972, pp 111-112

Abstract: Experiments are described concerned with modulation using a resonator type modulator with gallium arsenide crystals of laser radiations with wavelengths of 3.39 and 10.6 micron. The resonator is a symmetrical strip line loaded with two gallium arsenide crystals and shorted at the ends. Radiation was only transmitted through one crystal; the other was used for retardation of the modulation wave in the line, necessary with synchronous interaction of the modulation waves and the radiation. Two plane-parallel plates of gallium arsenide inclined to the Brewster angle are used as an analyser. The length of the resonator is 100 mm. the cross section of the crystals is 3 x 3 mm. G4-5 and G3-21 standard generators were used as sources of the modulating signal. 1 fig. 1 tab. 4 ref. Received by editors, 6 April 1972.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

1/2 015 UNCLASSIFIED PROCESSING DATE--13NOV70

TITLE--AN ATOMIC ABSORPTION METHOD FOR THE DETERMINATION OF GOLD IN ELECTROLYTES -U-

AUTHOR-(02)-SASOV, V.N., REZEPINA, V.A.

COUNTRY OF INFO--USSR

SOURCE--IZVESTIYA SIBIRSKOGO OTDELENIYA AKADEMII NAUK SSSR, NO 4, SERIYA KHIMICHESKIKH NAUK, 1970, NR 2, PP 107-110

DATE PUBLISHED--------70

SUBJECT AREAS--CHEMISTRY, MATERIALS

TOPIC TAGS--GOLD, CHEMICAL ABSORPTION, ELECTROLYTE, CHEMICAL ANALYSIS

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1993/0586 STEP NO--UR/0289/70/000/000/0107/0110

CIRC ACCESSION NO--AP0113477

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR UDC: 669.24:535.323

SASOVSKAYA, I. I. and NOSKOV, M. N., Institute of Physics, Ural Scientific Center, Academy of Sciences USSR

"Optical Interband Transitions in Nickel and Nickel-Base Alloys"

Sverdlovsk, Fizika metallov i metallovedeniye, Vol 33, No 1, Jan 72, pp 86-93

Abstract: Presented are the results of interband transitions (IT) studies in nickel alloys with additions of Cu, Al, Mn and Fe. The measurements included the light conductence σ (ω) within the spectral range of 0.7-

2/2 015 UNCLASSIFIED PROCESSING DATE--13NOV70

CIRC ACCESSION NO--AP0113477

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE INTERFERENCE OF NH SUB4 CNS, (NH SUB2) SUB2 CNS, NAOH, CUCL SUB2, HCL AND H SUB2 SO SUB4 HAS BEEN INVESTIGATED IN THE ABSORPTION OF THE ANALYTICAL LINE AU-2428 ANGSTROM. ATOMIC ABSORPTION METHOD IS SUGGESTED FOR THE DETERMINING OF GOLD IN ELECTROLYTES OF THE DIFFERENT CHEMICAL COMPOSITION. THE SENSITIVITY OF THE METHOD IS ABOUT 1 MU G-ML, THE VARIATION COEFFICIENT IS ABOUT 1-4PERCENT. FACILITY: INSTITUT FIZIKO-KHIMICHESKIKH OSNOV PERERABOTKI MINERAL'NOGO SYR'YA SO AN SSSR, NOVOSIBIRSK.

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

UNCLASSIFIED

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR

SASOVSKAYA, I. I., et al, Fizika metallov i metallovedeniye, Vol 33, No 1, Jan 72, pp 86-93

the second component is yet to be confirmed. (4 illustrations, 1 table, 31 bibliographic references).

2/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

1/2 019 UNCLASSIFIED PROCESSING DATE--18SEP70

TITLE--HIGH STRENGTH SILICATE CONCRETE ON THE BASIS OF LIME SILICA BINDERS
-U-

AUTHOR-(02)-SATALKIN, A.W., KROMIN, L.P.

COUNTRY OF INFO--USSR

SOURCE--BAUSTOFFINDUSTRIE, 1970, VOL 13, NR 3, PP 101-103

DATE PUBLISHED--------70

SUBJECT AREAS--MATERIALS

TOPIC TAGS--CONCRETE, CHEMICAL COMPOSITION, MECHANICAL STRENGTH, LIME, SILICATE, MAGNESIUM CHLORIDE, MAGNESIUM OXIDE, AMMONIUM CHLORIDE

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAME--1989/0172 STEP NO--GE/0157/70/013/003/0101/0103

CIRC ACCESSION NO--AP0106828

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

UNCLASSIFIED PROCESSING DATE--18SEP70

2/2 019

CIRC ACCESSION NO--AP0106828

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE AUTHORS REPORT ON A COMPREHENSIVE RESEARCH PROGRAMME WHICH WAS AIMED AT THE DEVELOPMENT OF A NEW SILICATE CEMENT ON THE BASIS OF LIME AND SAND. IT WAS STATED THAT THE CRUSHING STRENGTH OF THE LIME SILICA CEMENT DECREASES WITH RISING MGO CONTENT OF THE LIME. THE USE OF ADDITIVES MADE IT POSSIBLE TO ARRIVE AT A NEW GAIN IN STRENGTH. HIGHLY EFFICIENT ADDITIVES ARE MGCL SUB2 AND NH SUB4 CL. SILICATE CONCRETE WITH MGO LIME ARE REMARKABLY RESISTANT TO LOW TEMPERATURES. THE RESULTS OF INVESTIGATIONS INTO THE INFLUENCE OF CORROSION PROCESSES ON THE REINFORCEMENT OF SILICATE CONCRETE BASED ON MGO LIME ARE BRIEFLY DISCUSSED.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR UDC: 518.5:681.3.06

LEYFMAN, L. Ya., SATANOVA, E. A.

"Solution of Pert Problems in the Case of Limited Unstored Resources Using the Random Search Method"

Sb. tr. In-t gidrodinam. Sib. Otd. AN SSSR (Collected Works. Institute of Hydrodynamics. Siberian Department, Academy of Sciences of the USSR), 1970, vyp. 3, pp 71-108 (from RZh-Kibernetika, No 11, Nov 71, Abstract No 11V858)

Translation: The paper deals with problems of minimizing development time in the case of unstored limited resources. The corresponding algorithms and program for the M-20 computer are described. V. Mikheyev.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

1/2 007 UNCLASSIFIED PROCESSING DATE--13NOV70

TITLE--INTENSIFICATION OF THE FINISHING OF A CUT STAPLE FIBER -U-

AUTHOR-(05)-KREMNEV, O.A., BOROVSKIY, V.R., SATANOVSKIY, A.L., KIGEL, T.B., BUGAYCHUK, N.F.

COUNTRY OF INFO--USSR

SOURCE--KHIM. VOLOKNA 1970, (2), 53-5 (RUSS)

DATE PUBLISHED--------70

SUBJECT AREAS--MATERIALS

TOPIC TAGS--RAYON, TEXTILE

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--2000/1661 STEP NO--UR/0183/70/000/002/0053/0055

CIRC ACCESSION NO--AP0125283

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

2/2 007 UNCLASSIFIED PROCESSING DATE--13NOV70

CIRC ACCESSION NO--AP0125283

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE CON. CONTINUOUS WASHING OF RAYON STAPLE WITH DIL. NAOH SOLN. AT 78DEGREES REQUIRES 135 SEC TO REDUCE ITS S CONTENT BELOW 0.075PERCENT. THE INSERTION OF ROLLERS, WHICH COMPRESS THE STAPLE PERIODICALLY DURING ITS PASSAGE THROUGH THE BATH, AND TEMP. INCREASE TO 95DEGREES REDUCED THIS TIME TO 20-5 SEC. THE WASHING TIME WAS ALSO REDUCED TO 15-20 SEC WHEN VIBRATIONS OF 200 CYCLES-MIN AND 50 MM AMPLITUDE WERE APPLIED TO THE WASH SOLN. HELD AT 80DEGREES. BOTH OF THESE METHODS INCREASED PRODUCTIVITY. THE VIBRATIONS GAVE SOFTER, EASIER TO DRY FIBERS. FACILITY: INST. TEKH. TEPLOFIZ., KIEV, USSR.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

AA0040756 STANOVSKIY YA.YE. UR/0482 3/70 5

Soviet Inventions Illustrated, Section I Chemical, Derwent,

234624 MOULD LUBRICATOR FOR CONTINUOUS CASTING PLANTS uses feed channels which issue above the collector so as to ensure even distribution of lubricant round the mould perimeter. Lubricant is pumped etc. from tank 1 to the frame 2 on the mould 3 and via a feedline 4 with choke 5. It thus reaches the collector 7 and as this fills so the lubricant fills all the channels 8. When there is excess lubricant pressure in the collector, the lubricant is fed in identical portions into all these channels and thus flows out at the mould perimeter in identical portions. 7.10.65. as 1031428/22-2. EVTEEV D.P et al. Metallurgical Plant Design Inst. (26.6.69.) Bul.4/10.1.69. Class 31c. Int.Cl. B22d.

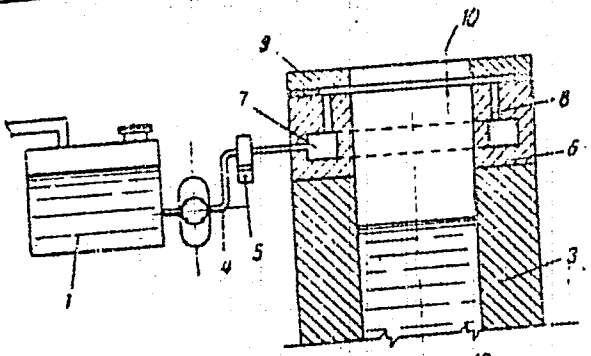
1/3 18

19750439

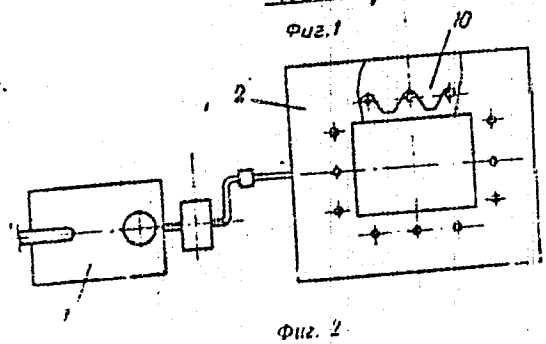
APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

AA0040756



Фиг.1



Фиг. 2

2/3

19750440

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

AA0040756

AUTHORS: Yevteyev, D. P.; Zhidovinova, M. M.; Karpeka, V. A.; Kaushanskiy, A. S.; Krulevetskiy, S. A.; Pravdin, V. S.; Satanovskiy, Ya. Ye.; Ful'makht, V. V.; Shabanov, A. N.

Gosudarstvennyy Soyuznyy Institut po Proyektirovaniyu Metallurgicheskikh Zavodov

19750441

3/3

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

SATAROV A.G.

Acc. Nr.: AN0104123

Ref. Code: UR9003

49

TITLE-- ANNOUNCEMENT OF THE COMMITTEE ON LENIN AND STATE PRIZES, U.S.S.R.

NEWSPAPER-- IZVESTIYA, MAY 28, 1970, P 4, COLS 1-5

ABSTRACT-- NINETY ONE BASIC AND APPLIED RESEARCH WORKS HAVE BEEN NOMINATED FOR THE STATE PRIZES. TWO OF THESE, "THE MULTI-PURPOSE INDUSTRIAL HELICOPTER KA-26", BY N. I. KAMOV, V. B. AL.PEROVICH, V. B. BARSHEVSKIY, A. A. DMITRIYEV, G. I. IOFFE, M. A. KUPER, L. A. POTASHNIK, N. N. PRIOROV, A. G. SATAROV, I. M. VEDENEYEV, S. B. BREN, AND V. A. NAZAROV, AND "THE DEVELOPMENT OF TURBOFAN JET ENGINES NK-8 AND NK-8-4, AND THE DEVELOPMENT AND REDUCTION TO SERIAL PRODUCTION A SYSTEM OF TECHNOLOGICAL PROCESSES WHICH ASSURED WIDE USES FOR TITANIUM ALLOYS", BY N. D. KUZNETSOV, M. T. VASILISHIN, V. A. KURGANOV, P. M. MARKIN, V. D. RADCHENKO, P. A. SUKHOV, A. A. MUKHIN, V. G. SHITOV, G. I. MUSHENKO, L. A. SHKODO, AND G. P. DOLGOLENKO, HAVE BEEN SUBMITTED BY THE MINISTRY OF THE AVIATION INDUSTRY.

1/2

Reel/Frame
19870555

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

Acc. Nr.: AN0104123

"A SERIES OF INVESTIGATIONS INTO THE DYNAMICS OF A BODY WITH FLUID-FILLED CAVITIES", /65-68/, BY N. N. MOISEYEV, A. A. PETROV, V. V. RUMYANTSEV AND F. L. CHERNOUS,KO AND "ULTRA HIGH PRECISION JIG BORING MILLS WITH 1,000 X 1,600 AND 1,400 X 2,240 MM PLATENS", BY A. I. KIR,YANOV, V. G. ABRAMOVICH, I. V. GUTKIN, A. S. ALIMPIYEV, G. B. PAUKOV, AND A. S. YEGUDKIN, HAVE BEEN SUBMITTED BY THE COMPUTATION CENTER OF THE ACADEMY OF SCIENCES AND THE MINISTRY OF THE MACHINE TOOL CONSTRUCTION AND TOOL INDUSTRY, RESPECTIVELY.

"THE RADICALLY IMPROVED MELTING TECHNOLOGY OF CRITICAL-PURPOSE HIGH-ALLOY STEELS AND ALLOYS OF IMPROVED QUALITY ACHIEVED BY THE INERT GAS TREATMENT OUTSIDE THE FURNACE", BY YU. V. GERASIMOV, O. M. CHEKHOMOV, N. V. SIDOROV, S. K. FILATOV, B. A. CHEREMNYKH, R. M. KHAYRUTDINOV, I. P. BARMOTIN, L. K. KOSYREV, K. P. BAKANOV, N. N. VLASOV, P. I. MELIKHOV, AND N. A. TULIN, HAS BEEN SUBMITTED BY THE ZLATOUST METALLURGICAL PLANT.

2/2

Reel/Frame
19870556

K2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

UDC 621.793

USSR

SATAROV, G.KH.

"UVN-72R-1 High-Performance Equipment For Ion Sputtering Of Materials"

Elektron. prom-st'. Nauchno-tekhn. sb. (Electronics Industry. Scientific-Technical Collection), 1970, No 1, pp 71-72 (from RZh--Elektronika i yeye primeneniye, No 11, November 1970, Abstract No 11A277)

Translation: The equipment includes ion sources and a sputtering chamber. A discharge with a large current exists at the ion sources up to a pressure of 1.10^{-4} mm mercury. The presence of the two sources assures assures a high rate of sputtering and uniform density of the ion current with respect to the surface of the target. Sputtering of a number of technological materials was conducted. In the course of 8 hours it is possible to sputter a resistive layer on 200--300 substrates measuring 60 x 48 mm. 3 ref. I.B.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

1/2 031 UNCLASSIFIED PROCESSING DATE--11DEC70

TITLE--VACUUM CHAMBER FOR INVESTIGATION OF THE FOCUSING PROPERTIES AND SENSITIVITY TO DEVIATION OF ELECTROSTATIC SYSTEMS -U-

AUTHOR--SATAROV, I.K.

S

COUNTRY OF INFO--USSR

SOURCE--V SB. VOPR. ELEKTRON. TEKHNIKI (PROBLEMS OF ELECTRONICS

REFERENCE--RZH-ELEKTRONIKA I YEYE PRIMENENIYE, NO 6, JUNE 1970, ABSTRACT

DATE PUBLISHED--------70

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

TOPIC TAGS--VACUUM CHAMBER, ELECTROVACUUM, VACUUM TUBE, ELECTRON GUN, ELECTROSTATICS

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY FICHE NO----FD70/605023/B04 STEP NO--UR/0000/70/000/000/0165/0168

CIRC ACCESSION NO--AR0141241

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

2/2 031 UNCLASSIFIED PROCESSING DATE--11DEC70

CIRC ACCESSION NO--AR0141241

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE DESIGN IS CONSIDERED OF A VACUUM CHAMBER, WITH THE AID OF WHICH IT IS POSSIBLE QUICKLY AND IN A SATISFACTORILY WIDE RANGE TO INVESTIGATE A WHOLE SERIES OF ELECTROVACUUM DEVICES (SUCH AS RECEIVING TUBES), ELECTRON GUNS, DEFOCUSING AND FOCUSING OF ELECTROSTATIC SYSTEMS, AND THE LIKE.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR

UDC 621.385.002:658.28

SATAROV, I.K.

"Vacuum Chamber For Investigation Of The Focusing Properties And Sensitivity To Deviation Of Electrostatic Systems"

V sb. Vopr. elektron. tekhniki (Problems Of Electronics Technology -- Collection Of Works), Saratov, 1970, pp 165-168 (from RZh--Elektronika i yeye primeneniye, No 6, June 1970, Abstract No 6A105)

Translation: The design is considered of a vacuum chamber, with the aid of which it is possible quickly and in a satisfactorily wide range to investigate a whole series of electrovacuum devices (such as receiving tubes), electron guns, defocusing and focusing of electrostatic systems, and the like. Summary.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

1/2 017 UNCLASSIFIED PROCESSING DATE--16OCT70

TITLE--NEW MEASUREMENTS OF ANGULAR DEPENDENCE OF DEPOLARIZATION PARAMETER IN PP SCATTERING AT 635 MEV -U-

AUTHOR-(03)-ZULKARNEYEV, R.YA., NADEZHDIN, V.S., SATAROV, V.I.

COUNTRY OF INFO--USSR

SOURCE--YADERN. FIZ. 11: 178-83, 1970

DATE PUBLISHED--------70

SUBJECT AREAS--PHYSICS

TOPIC TAGS--PROTON SCATTERING, PROTON INTERACTION, DEPOLARIZATION, PHASE SHIFT ANALYSIS, PARTICLE SYMMETRY

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1988/0670 STEP NO--UR/0367/70/011/000/0178/0183

CIRC ACCESSION NO--AP0105646

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

2/2 017 UNCLASSIFIED PROCESSING DATE--16OCT70

CIRC ACCESSION NO--AP0105646

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. NEW MEASUREMENTS OF THE DEPOLARIZATION PARAMETER IN PP SCATTERING AT 635 MEV IN A WIDE ANGLE INTERVAL AND WITH HIGHER STATISTICAL ACCURACY, ARE MADE. THE RESULTS OBTAINED ARE COMPARED WITH THE EXPERIMENTAL RESULTS OF OTHERS, WITH PREDICTIONS OF THE PHASE SHIFT ANALYSIS, AND WITH THE THEORY BASED ON M(12) AND SU(12)SUBL TIMES SYMMETRIES.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR

UDC 539.125.5

LAVRUKHINA, A. K., USTINOVA, G. K., MALYSHEV, V. V., and SATAROVA, L. M.

"Modelling Nuclear Reactions in an Isotropically Irradiated Thick Target"

Moscow, Atomnaya Energiya, Vol 34, No 1, Jan 73, pp 23-28

Abstract: An analytical method, previously developed by the authors, for calculating the intensity of cosmic radiation and the activity of cosmogenic isotopes at any point of an isotropically irradiated cosmic body of any size and any composition was used to simulate nuclear reactions in an isotropically irradiated thick target. In compliance with optimum dimensions for the development of nuclear cascade in iron, an iron sphere of 10 cm radius served as target. The sphere, rotating in two perpendicular planes, was irradiated by a 660-Mev proton beam. As a result of rotation, the surface of the sphere is irradiated isotropically. The activity of Na^{24} in thin aluminum plates and the activities of Mn^{52}, V^{48}, Sc^{44m}, Sc^{47}, and Ca^{47} in iron plates placed at various depths along the diameter of the sphere were measured. The experimental results are compared with curves calculated by the analytical method. It is shown that at a depth of $\sim$ 2 cm, the calculated activities are in quantitative agreement with experimental data. The depth distributions of cosmogenic isotopes in iron meteorites of various sizes are analyzed. A comparison with calculations by the Monte Carlo method is presented. Six figures, forty bibliographic references.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR

LAVRUKHINA, A. K.; USTINOVA, G. K.; MALYSHEV, V. V.; SATAROVA, L. M.

"Modelling Nuclear Reactions in Isotropically Irradiated, Thick Targets"

Moscow, Atomnaya Energiya; January, 1973; pp 23-8

ABSTRACT: While revolving about two mutually perpendicular axes, an iron sphere, having a radius of 10 cm, is irradiated by a 660-Mev proton beam. As a result of such rotation, the surface of the sphere is irradiated isotropically. The activity of Na^{24} in thin aluminum plates and Mn^{52}, V^{48}, Sc^{44m}, Sc^{47}, and Ca^{47} in iron plates placed at various depths along the diameter of the sphere was measured. The experimental results are compared with calculated curves obtained by an analytical method used for the analysis of activity in meteorites and lunar rocks. It was shown that at a depth of ~ 2 cm below the surface the activity calculated by the analytical method agrees quantitatively with the experimental results.

The laws governing the distributions of cosmogenic isotopes in iron meteorites of various sizes are analyzed. A comparison with calculations by the Monte Carlo method is presented.

The article includes six figures. There are 40 bibliographic references.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

1/2 035 UNCLASSIFIED PROCESSING DATE--11DEC70

TITLE--INVESTIGATION OF COSMIC RAY INDUCED TRACKS IN METEORITIC MINERALS -U-

AUTHOR-(05)-KASHKAROV, L.L., GENAEVA, L.I., MALISHEV, V.V., SATAROVA, L.K., LAVRUKHINA, A.K.

COUNTRY OF INFO--USSR, HUNGARY

SOURCE--INTERNATIONAL CONFERENCE ON COSMIC RAYS, 11TH, BUDAPEST, HUNGARY, AUGUST 25-SEPTEMBER 4, 1969, PROCEEDINGS. VOLUME 1 ORIGIN AND GALACTIC

DATE PUBLISHED--------70

SUBJECT AREAS--EARTH SCIENCES AND OCEANOGRAPHY, ASTRONOMY, ASTROPHYSICS, ATMOSPHERIC SCIENCES

TOPIC TAGS--METEORITE, MINERAL, COSMIC RAY, NUCLEUS, PROTON, TRACK ANALYSIS

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY FICHE NO----FD70/005061/803 STEP NO--HU/2506/70/029/000/0449/0452

CIRC ACCESSION NO--AT0144425

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

2/2 035 UNCLASSIFIED PROCESSING DATE--11DEC70

CIRC ACCESSION NO--AT0144425

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. TWO BASIC COSMIC RAY TRACK SOURCES ARE CONSIDERED: HEAVY PRIMARIES (Z GREATER THAN 22) AND SECONDARY SPALLATION AND FISSION PRODUCTS BY HIGH ENERGY PROTON INTERACTIONS IN METEORITIC CONSTITUENTS. WE PRESENT HERE EXPERIMENTAL DATA ON CALIBRATION OF TRACK LENGTHS IN METEORITIC SILICATE MINERALS. THE INVESTIGATED MINERALS WERE IRRADIATED IN THE HEAVY ION AND HIGH ENERGY PROTON ACCELERATORS IN DUBNA. FINALLY WE REPORT THE RESULTS OF MEASURING FOSSIL TRACK DENSITIES AND LENGTH DISTRIBUTION IN OLIVINE CRYSTALS SAMPLED FROM SEVERAL REGIONS OF THE PALLASITE LLIMAES. THE RELATION VVH-VH COSMIC RAY NUCLEI APPROXIMATELY 2 TIMES 0.0001 WAS OBTAINED. FACILITY: AKADEMIIA NAUK SSSR, INSTITUT GEOKHIMII I ANALITICHESKOI KHIMII, MOSCOW, USSR.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

1/2 031 UNCLASSIFIED PROCESSING DATE--27NOV70

TITLE--MODELING OF NUCLEAR REACTIONS OF COSMIC RAY INTERACTION WITH THE MATERIAL OF STONY METEORITES -U-

AUTHOR-(05)-LAVRUKHINA, A.K., REVINA, L.D., MALYSHEV, V.V., YUKINA, L.V., SATAROVA, L.M.

COUNTRY OF INFO--USSR

SOURCE--GEOKHIMIYA 1970, (5), 531-9

DATE PUBLISHED--------70

SUBJECT AREAS--NUCLEAR SCIENCE AND TECHNOLOGY, ATMOSPHERIC SCIENCES, ASTRONOMY, ASTROPHYSICS, PHYSICS

TOPIC TAGS--METEORITE, COSMIC RAY, NUCLEAR REACTION, ISOTOPE, BERYLLIUM ISOTOPE, IRON ISOTOPE, OXYGEN ISOTOPE

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3007/0911 STEP NO--UR/0007/70/000/005/0531/0539

CIRC ACCESSION NO--AP0136343

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

2/2 031 UNCLASSIFIED PROCESSING DATE--27NOV70

CIRC ACCESSION NO--AP0136343

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. A POSSIBLE USE OF THE SEMI EMPIRICAL EQUATIONS OF RUDSTAM (1966) AND V. SCHWARTZ-H. GESCHGER (1967) FOR CALCG. THE CROSS SECTION OF ISOTOPE FORMATION IN TARGETS OF COMPLICATED CHEM. COMPN., IRRADIATED BY PROTONS WITH E EQUALS 660 MEV AND 19.2 GEV, WAS INVESTIGATED. THE CROSS SECTIONS FOR REACTION OF THE PRIME7 BE FORMATION FROM THE PRIME16 O NUCLEI AND BY PRIME56 FE(P, PN) PRIME55 FE REACTIONS WERE EVALUATED. THE MATERIAL OF THE ZAISAN LAKE AND KUNZSHAK STONY METEORITES WAS IRRADIATED BY PROTONS WITH ENERGIES OF 660 MEV AND 19.2 GEV, RESP. THE DIFFERENT FRACTION OF ELEMENTS WERE ISOLATED RADIOCHEM. THE MEASURED RADIOACTIVITIES WERE COMPARED WITH CALCD. VALUES. SATISFACTORY AGREEMENTS WERE OBSD. FOR MOST ISOTOPES. IN GENERAL THE AGREEMENT WAS BETTER AT E EQUALS 660 MEV THAN AT E EQUALS 19.2 GEV. THIS WAS POSSIBLE CAUSED BY AN APPEARANCE OF THE MECHANISM OF NUCLEI SPALLATION IN THE E IS CONGRUENT TO 10 GEV REGION WHICH WAS QUAL. DIFFERENT THAN THE CASCADE MECHANISM. THE DATA OBTAINED CAN BE USED FOR MODELING OF THE DISTRIBUTION OF RATES OF COSMOGENIC ISOTOPE FORMATION IN COSMIC BODIES WHICH IS NECESSARY FOR QUAL. INVESTIGATIONS OF THE EFFECT OF COSMIC RAYS ON THE STONY METEORITES, SURFACE LAYERS OF THE MOON, AND ASTEROIDS. FACILITY: V. I. VERNADSKII INST. GEOCHEM. ANAL. CHEM., MOSCOW, USSR.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

1/2 030 UNCLASSIFIED PROCESSING DATE--16OCT70

TITLE--ONCE MORE ON INDUCTION OF CEREBRAL TUMORS IN RATS BY METHYLNITROSOUREA -U-

AUTHOR-(04)-DIMANT, I.N., LOKTIONOV, G.M., SATAYEV, M.M., ISRAILYAN, A.A.

COUNTRY OF INFO--USSR

SOURCE--BYULLETEN' EKSPERIMENTAL'NOY BIOLOGII I MEDITSINY, 1970, VOL 69, NR 5, PP 90-92

DATE PUBLISHED--------70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES

TOPIC TAGS--TUMOR, RAT, BRAIN, HORMONE, X RAY RADIATION BIOLOGIC EFFECT

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1998/0204 STEP NO--UR/0219/70/069/005/0090/0092

CIRC ACCESSION NO--AP0120902

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

2/2 030 UNCLASSIFIED PROCESSING DATE--16OCT70

CIRC ACCESSION NO--AP0120902

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE ARTICLE SETS FORTH THE RESULTANT DATA OF EXPERIMENTS ON MONGREL RATS INVOLVING THE INDUCTION OF CEREBRAL TUMORS BY INTRAVENOUS INJECTION OF METHYLNITROSOUREA. AN ANALYSIS OF THE RESULTS OF PERSONAL EXPERIMENTS WITH STATISTICAL TREATMENT SHOWED THE PRESENCE OF A SIGNIFICANT RELATION BETWEEN THE INCIDENCE OF OCCURRENCE OF CEREBRAL NEOPLASMS AND DISTURBANCES OF THE HORMONAL BALANCE CAUSED BY X IRRADIATION OF THE OVARIES AND FEEDING OF 6,METHYLTHIOURACYL. COMPARATIVE STATISTICAL STUDY OF LITERATURE SOURCES TESTIFY TO THE ROLE OF BIOLOGICAL PECULIARITIES OF THE LINES OF ANIMALS IN THIS PROCESS. FACILITY: INSTITUTE OF ROENTGENOLOGY, RADIOLOGY, AND ONCOLOGY, TASHKENT.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

1/2 008 UNCLASSIFIED PROCESSING DATE--13NOV70

TITLE--ABSENCE OF THE 11 S COMPONENT IN GLOBULINS OF WILD SPECIES OF SOJA HISPIDA -U-

AUTHOR-(03)-GAVRILYUK, I.P., SAIBALDINA, S.T., KONAREV, V.G.

COUNTRY OF INFO--USSR

SOURCE--DOKL. AKAD. NAUK SSSR 1970, 190(5), 1229-31

DATE PUBLISHED--------70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES

TOPIC TAGS--PLANT PHYSIOLOGY, GLOBULIN, PROTEIN

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3005/1668 STEP NO--UR/0020/70/190/005/1229/1231

CIRC ACCESSION NO--AT0133573

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

2/2 008 UNCLASSIFIED PROCESSING DATE--13NOV70

CIRC ACCESSION NO--AT0133573

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. SEEDS FROM 14 SPECIMENS OF CULTIVATED SOYBEAN PLANTS AND 13 OF WILD VARIETIES WERE USED AS PROTEIN SOURCE. THE EXTD. PROTEIN MASS WAS DIALYZED AND SUBJECTED TO IMMUNOELECTROPHORETIC ANAL. THE SALT AND WATER EXTRACTABLE FRACTIONS OF THE SEED PROTEINS FROM THE WILD PLANT VARIETIES LACK THE 11 S FRACTION WHICH IS PRESENT IN THE CULTURED VARIETIES. THE SEEDS OF G. USSURIENSIS CONTAIN A PROTEIN THAT IS CLOSE IN STRUCTURE TO THE 11 S COMPONENT OF GLYCINE MAX GLOBULINS AND POSSIBLY ACTS AS ITS PRECURSOR.

FACILITY: VSES. INST. RASTENIEVOD IM. VAVILOVA, LENINGRAD, USSR.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

1/2 036 UNCLASSIFIED PROCESSING DATE--30OCT70

TITLE--EFFECT OF PENETRATING RADIATION ON THE ACTIVITY OF SUCCINATE DEHYDROGENASE IN ANIMAL TISSUES -U-

AUTHOR-(02)-SATKHOZHINA, E.A., UTESHEV, A.B.

COUNTRY OF INFO--USSR

SOURCE--RADIOBIOLOGIYA 1970, 10(1), 105-8

DATE PUBLISHED--------70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES

TOPIC TAGS--IONIZING RADIATION BIOLOGIC EFFECT, SUCCINATE DEHYDROGENASE, ANIMAL PHYSIOLOGY, LIVER, SPLEEN, KIDNEY, BRAIN, HEART

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3001/1846 STEP NO--UR/0205/70/010/001/0105/0108

CIRC ACCESSION NO--AP0127256

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

2/2 036 UNCLASSIFIED PROCESSING DATE--30OCT70

CIRC ACCESSION NO--AP0127256

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. MALE WHITE RATS AND GUINEA PIGS WERE IRRADIATED WITH 900 R AT 72 R-MIN AND SUCCINATE DEHYDROGENASE (I) ACTIVITIES WERE MEASURED AFTER THE INCUBATION OF LIVER, SPLEEN, KIDNEY, BRAIN, AND HEART TISSUES AT 37DEGREES FOR 30 MIN, 6-48 HR AFTER IRRADN. PENETRATING RADIATION SUPPRESSED I ACTIVITY IN ALL ORGANS EXCEPT THE LIVER AND SPLEEN, REACHING MAX. DEPRESSION WITHIN 12 HR IN THE RAT, AND WITHIN 48 HR IN THE GUINEA PIG. FACILITY: INST. BIOL. FIZ., PUSHCHINO, USSR.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR UDC 615.373:576.856.72.077.3

SATKOV, YU. V.

"Type Specificity of Monodiagnostica from Killed Leptospirae for the Microagglutination Reaction"

Moscow, Laboratornoya Delo, No 11, 1971, p 701

Abstract: The authors studied the type specificity of diagnosticums from killed Leptospira prepared by the Stoenner method from 10 standard strains; L. L. No 3,705 (hebdomadis); mitis (tarassovi); hond utrecht IV (canicola); Hedgehog (australis); Akijami "A" (autumnalis); Butembo (cynopteri); Salinem (pyrogenes); Dmitrovskiy (grippotyphosa); Wijnberg (icterohaemorrhagiae); pomona. The working dilution (titer) and the type specificity of diagnosticums were studied in the cross microagglutination reaction with standard hyperimmone sera. The reaction was conducted on slides placed in a moist chamber for 18 to 20 hrs and read by scanning the drops under the low power objective of a microscope with a dark field condenser. The reaction was considered positive if agglutination registered 2 plus or more. Strong cross reactions (up to a titer of 1:2 and higher) were given by sera against L. canicola with diagnosticum from L. L. pyrogenes and icterchaemorrhagiae; and with serum autumnalis with 1/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR UDC: 681.333

KABLIS, E. P., SATKYAVICHUS, E. B., MAKAVYATSKAS, R. A., SHAULIS, V. I.,
Kaunas Polytechnical Institute

"An Impact-Modeling Device"

Moscow, Otkrytiya, Izobreteniya, Promyshlennyye Obraztsy, Tovarnyye Znaki, No 4, Feb 72, Author's Certificate No 326600, Division G, filed 7 Aug 70, published 19 Jan 72, p 184

Translation: This Author's Certificate introduces an impact-modeling device which contains an operational amplifier with a diode at the output. As a distinguishing feature of the patent, the functional possibilities of the device are extended by connecting a special circuit in parallel with the amplifier feedback. The circuit is comprised of a star-connected first resistor and diode with its anode connected through a second resistor to the output of the amplifier, while the second plate of the capacitor is connected to the zero bus.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR UDC 681.333.53

RAGUL'SKENE, V. L., SATKYAVICHYUS, E. B., Kaunas Polytechnical Institute

"A Device for Impact Simulation"

Moscow, Otkrytiya, Izobreteniya, Promyshlennyye Obraztsy, Tovarnyye Znaki, No 12, 1970, Author's Certificate No 267202, filed 15 Mar 69, pp 122-123

Abstract: The Author's Certificate introduces an impact simulation device which contains an operational amplifier, resistors, and diodes. As a distinguishing feature of the patent, the device is designed for circuit simplification, increased speed, and improved universality. Two resistors are connected to the common point between two diodes connected in series opposition. The other ends of these two resistors are connected respectively to the output of the operational amplifier and to a voltage source which simulates the motion of the body being studied. The other ends of the diodes are connected respectively to the input of the operational amplifier and to the voltage source which simulates the motion of the body being studied.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

UDC 62-50

USSR

AMANGEL'DIYEV, B. R., SATSUK, V. V.

"A Combination Random Search Algorithm"

Alma-Ata, IAN Kazakh SSR, Seriya Fiziko-Matematicheskaya, No 3, May/Jun 71, pp 6-11

Abstract: The authors discuss an algorithm of random search for the extremum (minimum) of a function of many variables. The algorithm is based on the statistical gradient method (L. A. Rastrigin, "Staticheskiye metody poiska" [Statistical Methods of Search], Moscow, "Nauka", 1968) and utilizes the idea of the method of configurations. The proposed algorithm can operate in three modes, depending on the situations which arise during search: 1) random descent with "stimulation" by randomness; 2) steepest descent; 3) general operating mode. The algorithm was checked out on a number of test functions, identification problems, and optimum control problems. Examples are given illustrating use of the proposed algorithm for finding the extremum of a function of two variables and optimum control of metal heating. Four figures, bibliography of three titles.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR UDC 511.292+0.01.5:62-531.3

AMANGEL'DIYEV, B. R., SATSUK, V. V.

"Mathematical Modeling of the Process of Heating Metal Before Rolling"

Alma-Ata, IAN Kazakh SSR, Seriya Fiziko-Matematicheskaya, No 3, May/Jun 71, pp 11-15

Abstract: The authors study the dynamic principles governing the process of metal heating in soaking pits with regard to the thermal state of the liner, the gas mixture, and the temperature state of the ingots. A system of equations is presented for the dynamics of the process. The results of computer solution of the mathematical model are given for five different sets of heating conditions. The proposed mathematical model can be used to predict heating time and also to optimize heating conditions. Four tables, bibliography of five titles.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

1/2 025 UNCLASSIFIED PROCESSING DATE--09OCT70

TITLE--INFLUENCE OF RAUSEDYL ON THE LEVEL OF ADRENERGIC HORMONE MEDIATORS IN RATS -U-

AUTHOR--SATSUKEVICH, V.B.

COUNTRY OF INFO--USSR

SOURCE--DOKL. AKAD. NAUK BELORUSS. SSR 1970, 14(1), 74-6

DATE PUBLISHED--------70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES

TOPIC TAGS--PROCESSED PLANT PRODUCT, CARDIOVASCULAR DRUG, CATECHOLAMINE, EPINEPHRINE, NOREPINEPHRINE, SELECTIVE DRUG EFFECT, ADRENAL GLAND, BRAIN

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1988/0933 STEP NO--UR/0250/70/014/001/0074/0076

CIRC ACCESSION NO--AT0105802

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

2/2 025 UNCLASSIFIED PROCESSING DATE--09OCT70

CIRC ACCESSION NO--AT0105802

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE EFFECT OF RAUSEDYL ON THE LEVEL OF THE CATECHOL AMINES, ADRENALINE (A) AND NORADRENALINE (NA), ON VARIOUS TISSUES WERE STUDIED IN MALE RATS. ANIMALS IN (1) GROUP WERE GIVEN RAUSEDYL IN A DOSE 4 MG-KG OF WT. S.C. DURING 4 DAYS. THE CONTROL (2) GROUP WAS GIVEN THE SAME DOSE OF PHYSIOL. SOLN. IN (3) WERE INTACT ANIMALS. AFTER S.C. INJECTION OF 4 MG RAUSEDYL-KG, THE LEVEL OF NA DECREASED IN BRAIN AND HEART BY 93 AND 88PERCENT AND INCREASED IN THE ADRENALS, COMPARED WITH SALINE INJECTED CONTROLS. THE LEVEL OF A IN THE BRAIN AND HEART INCREASED, AND IN THE ADRENAL DECREASED TO ZERO AFTER TREATMENT. NO CATECHOL AMINES WERE FOUND IN THE HYPOTHALAMUS.

FACILITY: BELORUSS. GOS. UNIV. IM. LENINA, MINSK, USSR.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

1/2 039 UNCLASSIFIED PROCESSING DATE--30OCT70

TITLE--A METHOD OF CONTROL OF THE STRUCTURE OF FIBROUS PARTS -U-

AUTHOR-(02)-SATTAROV, D.K., FREYVERT, K.M.

COUNTRY OF INFO--USSR

SOURCE--LENINGRAD, OPTIKO-MEKHANICHESKAYA PROMYSHLENNOST', NO 2, FEB 70, PP 57-60

DATE PUBLISHED----FEB70

SUBJECT AREAS--PHYSICS

TOPIC TAGS--OPTIC IMAGE, FIBER OPTICS, QUALITY CONTROL, FIBER COMPOSITE, LIGHT SCATTERING, OPTIC MEASUREMENT

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1996/1578 STEP NO--UR/0237/70/000/002/0057/0060

CIRC ACCESSION NO--AP0118561

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

2/2 039 UNCLASSIFIED PROCESSING DATE--30OCT70

CIRC ACCESSION NO--AP0118561

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. MEASUREMENTS WERE PERFORMED OF THE LIGHT DISTRIBUTION ACCORDING TO THE IMAGE OF A LUMINOUS SLIT AT THE OUTLET LATERAL SURFACE OF A FIBROUS PART AND THERE WERE DETERMINED OPTIMUM CONDITIONS OF THE CONTROL OF THE STRUCTURE OF FIBROUS ELEMENTS.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

S

USSR

UDC 666.189.2.:535.8

SATTAROV, D. K., ORLOV, Yu, P., IVANOVA, L. N., IVANOV, V. A.

"The Use of Round Multiple-Strand Light Conductors for the Production of Pressed Optical Fiber Elements"

Leningrad, Optiko-Mekhanicheskaya Promyshlennost', No. 5, 1970, pp 43-46

Abstract: It is shown that round multiple-strand light conductors are suitable for the production of vacuumtight thermally pressed optical-fiber elements with a relatively low uniformity of the optical parameters with respect to the field of the part.

The experiments conducted show that circular multiple-strand light conductors made up of thin (0.3 mm diameter) fibers and having a final diameter of 2-3 mm are preferable.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

1/2 016 UNCLASSIFIED PROCESSING DATE--23OCT70

TITLE--MEASUREMENT OF (N, 2N) REACTION CROSS SECTIONS OF SOME ISOTOPES BY 14.5-MEV NEUTRON ACTIVATION -U-

AUTHOR--SATTAROV, M.G.

COUNTRY OF INFO--USSR

SOURCE--IZV. AKAD. NAUK UZB. SSR, SER. FIZ.-MAT. NAUK 1970, 14(1), 81-3

DATE PUBLISHED--------70

SUBJECT AREAS--PHYSICS, NUCLEAR SCIENCE AND TECHNOLOGY

TOPIC TAGS--MEASUREMENT, GAMMA RAY, NEUTRON ACTIVATION ANALYSIS, ISOTOPE, RADIOACTIVE DECAY SCHEME, NUCLEAR CROSS SECTION

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--2000/1030 STEP NO--UR/0166/70/014/001/0081/0083

CIRC ACCESSION NO--AP0124689

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

2/2 016 UNCLASSIFIED PROCESSING DATE--23OCT70

CIRC ACCESSION NO--AP0124689

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. N FOR ACTIVATION HAVING ENERGY 14.5 MEV WERE OBTAINED IN AN ACCELERATOR. THE CROSS SECTIONS WERE DETD. BY THE MEASUREMENT OF GAMMA ACTIVITIES OF THE IRRADIATED SAMPLES BY USING COMPARISON REACTIONS. ENERGIES OF GAMMA RAYS OF THE ACTIVATION PRODUCTS OF PRIME107 AG, PRIME63 CU, PRIME75 GE, PRIME125 SB, AND PRIME59 FE CHOSEN FOR THIS PURPOSE ARE CLOSE TO THOSE OF GAMMA RAYS OF THE ISOTOPES INVESTIGATED, WHICH HAS THE ADVANTAGE OF AVOIDING ERRORS WHICH FOLLOWS FROM THE VARIOUS VALUES OF EFFICIENCIES OF THE SCINTILLATION SPECTROMETER. THE SAMPLES OF SC, FE, CD, BASO SUB4, CEO SUB2 TOGETHER WITH THE SAMPLES FOR COMPARISON AG, CU, GE, SB AND FE, WERE IRRADIATED DURING 10-30 MIN. THE NAI(TL) SPECTROMETER HAD A RESOLN. OF 9PERCENT. THE FOLLOWING CROSS SECTIONS WERE FOUND: PRIME45 SC (N,2N) PRIME44 SC 185 PLUS OR MINUS 35 MB, PRIME54 FE(N,2N) PRIME53 FE 20 PLUS OR MINUS 4 MB PRIME112 CD(N,2N) PRIME111 CD PRIMEM 834 PLUS OR MINUS 135 MB, PRIME138 BA(N,2N) PRIME137 BA PRIMEM 1450 PLUS OR MINUS 220 MB, PRIME140 CE(N,2N) PRIME139 CE 1600 PLUS OR MINUS 250 MB. ERRORS CAN ARISE OWING TO THE INSTABILITY OF N ENERGY (14-15 MEV) AND TO THE INACCURACY OF ACTIVITY ASSAY AND THE DECAY SCHEMES OF THE ISOTOPES USED. RELIABILITY OF THE METHOD WAS VERIFIED ON REACTIONS, THE CROSS SECTIONS OF WHICH ARE WELL ESTABLISHED. FACILITY: INST. YAD. FIZ., TASHKENT, USSR.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

1/2 014 UNCLASSIFIED PROCESSING DATE--13NOV70

TITLE--OPTICAL ACTIVITY OF KYURSANGE PETROLEUMS -U-

AUTHOR-(04)-SHAKHVERDIYEV, YA.KH., SATTARZADE, I.S., GASPARYAN, N.G., SATTARZADE, A.D.

COUNTRY OF INFO--USSR

S

SOURCE--AZERB. NEFT. KHOZ. 1970, (1), 39-41

DATE PUBLISHED--------70

SUBJECT AREAS--MATERIALS, EARTH SCIENCES AND OCEANOGRAPHY

TOPIC TAGS--OPTIC PROPERTY, PETROLEUM DEPOSIT, GEOGRAPHIC LOCATION, AROMATIC HYDROCARBON

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3002/1128 STEP NO--UR/0487/70/000/001/0039/0041

CIRC ACCESSION NO--AP0128555

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

2/2 014 UNCLASSIFIED PROCESSING DATE--13NOV70

CIRC ACCESSION NO--AP0128555

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. SP. OPTICAL ROTATION (ALPHA) D OF PETROLEUM FROM A MULTISTRATAL KYURSANGE SAND GRAVEL FORMATION DECREASED FROM PLUS 0.63 TO PLUS 0.53 FROM THE UPPER TO THE LOWER STRATA. WITH INCREASING B.P. OF FRACTIONS 8, 60-95, 95-122, 122-50, 150-75, 175-200, 200-25, 225-250, 250-300, 300-50, 350-400, 400-450, AND 450-500DEGREES, (ALPHA) D CHANGED FROM 0.0 TO MINUS 0.04, MINUS 0.05, MINUS 0.03, MINUS 0.08, MINUS 0.09, MINUS 0.03, 0.00, PLUS 0.12, PLUS 0.57, PLUS 0.90, AND PLUS 2.63 FOR THE UPPER STRATA AND FROM 0.0 TO 0.0, PLUS 0.07, 0.00, MINUS 0.08, 0.06, PLUS 0.00, 0.00, PLUS 0.40, AND PLUS 0.55, PLUS 1.26, AND PLUS 3.09. AFTER SULFONATION, (ALPHA) D VALUES WERE LOWER, REFLECTING OPTICAL ACTIVITY IN THE AROMATIC HYDROCARBONS. THE VARIATION IN THE PARAFFINIC HYDROCARBON INDEXES J SUBAV (30.1 AND 35.9 FOR THE UPPER AND 29.4 AND 35.8 FOR THELOWER STRATA) FOR THE 60-500 AND 300-500DEGREES FRACTIONS AND IN THE AV. NO. OF NAPHTHENIC RINGS-MOL. (1.15, 1.74, 1.79, AND 3.60 FOR THE UPPER AND 1.24, 1.39, 1.65, AND 3.13 FOR THE LOWER STRAT) FOR THE 300-50, 350-400, 400-50, AND 450-500DEGREES FRACTIONS CORRELATED WELL WITH THE CHANGE IN (ALPHA) D.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

1/2 014 UNCLASSIFIED PROCESSING DATE--13NOV70

TITLE--OPTICAL ACTIVITY OF KYURSANGE PETROLEUMS -U-

AUTHOR-(04)-SHAKHVERDIYEV, YA.KH., SATTARZADE, I.S., GASPARYAN, N.G., SATTARZADE, A.D.

COUNTRY OF INFO--USSR

SOURCE--AZERB. NEFT. KHOZ. 1970, (1), 39-41

DATE PUBLISHED-------70

SUBJECT AREAS--MATERIALS, EARTH SCIENCES AND OCEANOGRAPHY

TOPIC TAGS--OPTIC PROPERTY, PETROLEUM DEPOSIT, GEOGRAPHIC LOCATION, AROMATIC HYDROCARBON

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3002/1128 STEP NO--UR/0487/70/000/001/0039/0041

CIRC ACCESSION NO--AP0128555

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

2/2 014 UNCLASSIFIED

CIRC ACCESSION NO--AP0128555 PROCESSING DATE--12NOV70

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. SP. OPTICAL ROTATION (ALPHA) D OF PETROLEUM FROM A MULTISTRATAL KYURSANGE SAND GRAVEL FORMATION DECREASED FROM PLUS 0.63 TO PLUS 0.53 FROM THE UPPER TO THE LOWER STRATA. WITH INCREASING B.P. OF FRACTIONS B. 60-95, 95-122, 122-50, 150-75, 175-200, 200-25, 225-250, 250-300, 300-50, 350-400, 400-450, AND 450-500DEGREES, (ALPHA) D CHANGED FROM 0.0 TO MINUS 0.04, MINUS 0.05, MINUS 0.03, MINUS 0.08, MINUS 0.09, MINUS 0.03, 0.00, PLUS 0.12, PLUS 0.57, PLUS 0.90; AND PLUS 2.63 FOR THE UPPER STRATA AND FROM 0.0 TO 0.0, PLUS 0.07, 0.00, MINUS 0.08, 0.06, PLUS 0.00, 0.00, PLUS 0.40, AND PLUS 0.55, PLUS 1.26, AND PLUS 3.09. AFTER SULFONATION, (ALPHA) D VALUES WERE LOWER, REFLECTING OPTICAL ACTIVITY IN THE AROMATIC HYDROCARBONS. THE VARIATION IN THE PARAFFINIC HYDROCARBON INDEXES J SUBAV (30.1 AND 35.9 FOR THE UPPER AND 29.4 AND 35.8 FOR THELOWER STRATA) FOR THE 60-500 AND 300-500DEGREES FRACTIONS AND IN THE AV. NO. OF NAPHTHENIC RINGS-MOL. (1.15, 1.74, 1.79, AND 3.60 FOR THE UPPER AND 1.24, 1.39, 1.65, AND 3.13 FOR THE LOWER STRAT) FOR THE 300-50, 350-400, 400-50, AND 450-500DEGREES FRACTIONS CORRELATED WELL WITH THE CHANGE IN (ALPHA) D.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR

SATUNINA, A. Ye., SOLOMINA, V. L.

"Method of Investigation of University-Type Systems for Planning of ACS"

Tr. Mosk. Energ. In-ta [Works of Moscow Institute of Power Engineering], 1973, No 158, pp 23-30 (Translated from Referativnyy Zhurnal Kibernetika, No 6, 1973, Abstract No 6V672).

Translation: During the process of planning an ACS, it is suggested that the following problems be solved in combination: 1) improvement of the structure and organization of administration; 2) improvement of document flow; 3) automation of administrative work; 4) increasing the technical skill of workers involved in administration and training of administrative workers to operate with the ACS.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR

SATYBALDINA, K. I.

"Estimating the Rate of Convergence to Stable Rules"

Vestn. AN KazSSR [Herald of Academy of Sciences, KazSSR], 1973, No 4, pp 57-65 (Translated from Referativnyy Zhurnal Kibernetika, No 9, 1973, Abstract No 9V9)

Translation: Let $\{\xi_n\}$ be a sequence of independent, identically distributed random quantities with distribution function $F(x)$ and $F_n(x)$ be the distribution function of the random quantities

$$\zeta_n = \frac{\sum_{k=1}^{n} \xi_k - A_n}{B_n}, \quad n = 1, 2, 3, \ldots,$$

where A_n and $B_n > 0$ are properly selected sequences of numbers, namely for the case in question

$$B_n = n^{\frac{1}{\alpha}}; \quad A_n = \begin{cases} 0, & \text{if } \alpha \neq 1 \\ \frac{2}{\pi}\beta_n \log n, & \text{if } \alpha = 1 \end{cases}$$

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR

SATYBALDINA, K. I., Vestn. AN KazSSR, 1973, No 4, pp 57-65

Let $G(x, \alpha, \lambda, \gamma, \beta) = G(x)$ be a stable rule with characteristic exponent $0<\alpha\leq 2$ and parameters $\lambda > 0$, $-\infty<\gamma<\infty$, $-1\leq\beta\leq 1$. The problem of estimating the rate of convergence of $F_n(x)$ to $G(x)$ is studied in the even metrics

$$\rho(F_n; G) = \sup_x |F_n - G|.$$

These estimates utilize characteristics which are now usually called pseudomoments

$$\mu_k = \int x^k d(F - G), \quad k = 0, 1, 2, 3, \ldots$$

$$\varkappa_r = r\int |x|^{r-1} |F - G| dx, \quad r \geq 0.$$

Subsequently, stable rules are studied for which $\gamma=0$, $\lambda=\frac{1}{\alpha}$, since a linear transformation of the variable usually reduces the general case to a single case.

The main result of this article is the following theorem, an extention of an estimate produced by V. M. Zolotarev for the normal limiting distribution to the case of stable rules.

2/3

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR

SATYBALDINA, K. I., Vestn. AN KazSSR, 1973, No 4, pp 57-65

Theorem: If distribution $F(x)$ of random quantities ξ_k satisfies the conditions:

1. $\mu_k=0$ for $k\leq s-1$, $s = 1 + |\alpha|$,
2. $\varkappa_\alpha<\infty$, $0<\alpha\leq 2$,

then there are positive constants c and c_1, depending only on the distribution of $G(x)$, such that for all $n\geq 1$

$$\rho(F_n;\ G) \leq c \max(\varkappa_\alpha, \varkappa^r_\alpha) n^{1-\frac{s}{\alpha}},$$

where

$$r = \begin{cases} \frac{n}{sn+1}, & \text{if } 1\leq\alpha\leq 2, \\ 1 - \phi(\log n + \frac{2}{\alpha}), & \text{if } 0<\alpha<1, \end{cases}$$

where $\phi(x) = \frac{\log x - \log c_1}{ax}$ is a monotonically decreasing function in the interval $x \geq \frac{2}{\alpha}$.

3/3

Author's view

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR

SATYBALDINA, K. I.

"The Problem of Estimating the Rate of Convergence in a Limit Theorem with Stable Limiting Rule"

Teoriya Veroyatnostey i Eye Primeneniya [Theory of Probabilities and its Applications], 1973, Vol 18, No 1, pp 211-212 (Translated from Referativnyy Zhurnal Kibernetika, No 6, 1973, Abstract No 6V22, by the author).

Translation: In (RZhMat, 1973, 3V25), the author presented one result related to estimation of the residual term in a limit theorem for sums of independent random quantities tending toward a stable rule. This result was an extension to the entire class of stable rules of one estimate produced by V. M. Zolotarev (RZhMat, 1972, 7V25) for the case of the normal limit rule. In this note, a similar extension is suggested for the case of stable rules with values of main parameter α in the interval $1 \leq \alpha \leq 2$.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

Pesticides

USSR

UDC 631.850.13

IVANOV, R. N., PAVLOVA, A. I., TUGOVA, N. N., and SATYBALDYYEV, T., Institute of Chemistry, Academy of Sciences Uzbek SSR

"The Effect of the Moisture Content of Ammophos Granules on Their Strength"

Tashkent, Uzbekskiy Khimicheskiy Zhurnal, Vol 17, No 3, 1973, pp 70-72

Abstract: The mechanical strength of ammophos granules with a diameter of 1.5-6.0 mm in relation to their moisture content was investigated. The ammophos granules were produced by the liquified solids method. The moisture content varied in the 0,5-7.0% range. The strength of the granules (their resistance to deformation) decreased with their size because of decreasing density and also with the moisture content. Mathematical formulas that describe the relations established were derived. The work was carried out under the direction of M. M. Nabiyev, Member of the Academy of Sciences Uzbek SSR.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

1/2 024 UNCLASSIFIED PROCESSING DATE--23OCT70

TITLE--CRYSTAL STRUCTURE OF ZINC OXIDE OBTAINED BY OXIDIZING ZINC SULFIDE THIN FILMS -U-

AUTHOR-(03)-SHALIMOVA, K.V., SATYBAYEV, N.M., DMITRIYEV, V.A.

COUNTRY OF INFO--USSR

SOURCE--KRISTALLOGRAFIYA 1970, 15(1), 200-1

DATE PUBLISHED--------70

SUBJECT AREAS--CHEMISTRY, MATERIALS, PHYSICS

TOPIC TAGS--ZINC SULFIDE, ZINC OXIDE, SOLID SOLUTION, CRYSTAL STRUCTURE, X RAY DIFFRACTION, ELECTRON DIFFRACTION, VAPOR CONDENSATION, VACUUM DISTILLATION, VACUUM SUBLIMATION

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1997/0517 STEP NO--UR/0070/70/015/001/0200/0201

CIRC ACCESSION NO--AR0119437

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

2/2 024 UNCLASSIFIED PROCESSING DATE--23OCT70

CIRC ACCESSION NO--AR0119437

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. CHANGES IN THE ZNS THINFILM STRUCTURE WERE STUDIED BY ELECTRON AND X RAY DIFFRACTION. THE MAX. TEMP. WAS SOUGHT FOR WHICH ZNS (THICKNESS 1.0 MU, PREPED. BY VACUUM CONDENSATION) IS NOT OXIDIZED IN AIR. BY HEATING AT 550-600DEGREES FOR 1 HR, THE FORMATION OF A ZNO FILM OF HEXAGONAL MODIFICATION WITHOUT ANY ORIENTATION WAS OBSD. ON THE SURFACE OF THE ZNS. AFTER 4 HR AT 600DEGREES OR 2 HR AT 650DEGREES, COMPLETE OXIDN. OF THE ZNS WAS OBSD.; THE CRYSTALS OF ZNO FORMED WERE ORIENTED PARALLEL TO THE (0001) PLANE OF THE SUBSTRATE. ZNS-ZNO SOLID SOLNS. WERE NOT OBSD. FACILITY: MOSK. ENERG. INST., MOSCOW, USSR.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR

SATYUKOV, A. I. and SVETLICHNYY, V. M.

UDC: 621.382

"Mixing Characteristics of Germanium Thermoelectrical UHF Radiation Indicators With 'Hot' Charge Carriers"

Kiev, Izvestiya VUZ SSSR--Radioelektronika, No 10, 1972, pp 1238-1243

Abstract: After showing that the conversion losses of germanium thermoelectrical uhf radiation indicators are high under the conditions of their present use, the authors describe experiments performed to develop devices with lower losses. These experimental devices were prepared from p-type germanium with a resistivity of 0.15 ohm·cm and 0.5 ohm·cm, and were given small p^+-p junction areas by pulsed-current melting of fine gold wires to the germanium plates. This method produced junctions whose geometric shape was approximately hemispherical. Of these specimens, those with resistances of 50 to 400-500 were selected; devices with resistances of 50-150 were used as mixers in coaxial lines while those with resistances of 400-500 ohms were used with waveguides. Results of these experiments are given in the form of

1/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR

SATYUKOV, A. I., et al, Izvestiya VUZ SSSR--Radioelektronika, No 10, 1972, pp 1238-1243

curves of the conversion losses as a function of the heterodyne power and of the specimen resistance. Curves of intermediate frequency signal power for the specimens are also plotted. These experiments showed that the thermoelectrical effect of hot charge carriers in germanium can be successfully used in uhf mixers.

2/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

1/3 020 UNCLASSIFIED PROCESSING DATE--13NOV70

TITLE--ANGIOARCHITECTONICS AND HISTOTOPOGRAPHY OF LYMPH CAPILLARY NETS OF THE CUTANEOUS SCAR OF DOG AFTER LIMB AUTOGRAFTING AND AFTER LYMPH

AUTHOR--SATYUKOVA, G.S.

COUNTRY OF INFO--USSR

SOURCE--ARKH ANAT GISTOL EMBRIOL 58(2): 65-71. ILLUS. 1970.

DATE PUBLISHED--------70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES

TOPIC TAGS--LYMPHATIC SYSTEM, AUTOTRANSPLANTATION, HISTOLOGY, WOUND HEALING, COLLAGEN

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3002/1051 STEP NO--UR/9076/70/058/002/0065/0071

CIRC ACCESSION NO--AP0128431

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

2/3 020 UNCLASSIFIED PROCESSING DATE--13NOV70

CIRC ACCESSION NO--AP0128481

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THERE HAVE BEEN NO INVESTIGATIONS OF LYMPH VESSELS OF CUTANEOUS CICATRIX OF THE HIND LIMB IN THE DOG WITH REFERENCE TO STRUCTURAL PROPERTIES OF CONNECTIVE TISSUE BASE OF THE SCAR. INFORMATION ON LYMPH CAPILLARIES OF CUTANEOUS SCAR AFTER AUTOTRANSPLANTATION OF THE LIMB IN DOGS IS ALSO LACKING. A TOTAL OF 5 TYPES OF EXPERIMENTAL MODEL OPERATIONS (AUTOTRANSPLANTATION OF LIMB OR TRANSECTION OF ITS LYMPH COLLECTING VESSELS WITHOUT REPLANTATION) WAS PERFORMED IN 50 ADULT DOGS. LYMPH VESSELS OF SCAR AND SURROUNDING SKIN WERE STUDIED AFTER INJECTION WITH GEROTA'S MASS OR INDIA INK. IN ADDITION TO CLEARED PREPARATIONS, TISSUE SECTIONS WERE ALSO STUDIED, AS WELL AS MICROSCOPIC PREPARATIONS STAINED ACCORDING TO VARIOUS HISTOLOGIC METHODS. DATA HAVE THUS BEEN OBTAINED ON NETS OF LYMPH CAPILLARIES AND STRUCTURE OF CONNECTIVE TISSUE BASE OF "YOUNG" (4 DAYS-6 MO. AFTER OPERATION) AND "OLD" (6-18 MO.) SKIN SCARS OF THE DOG'S HIND LIMB. SOON AFTER HEALING OF THE WOUND BY 1ST INTENTION LYMPH CAPILLARIES ARE SEEN, AS WELL AS NUMEROUS BLOOD VESSELS; 2-3 WK POSTOPERATIVELY, THE NUMBER BLOOD VESSELS IN THE SCAR IS REDUCED CONSIDERABLY, WHILE LYMPH CAPILLARIES BECOME MUCH MORE NUMEROUS. THEY FORM NETS OF PECULIAR STRUCTURE, LONG AXES OF THEIR MESHES BEING ORIENTED INTHE DIRECTION OF THE SCAR'S COLLAGEN FIBERS. IN "YOUNG" SCARS, IN ADDITION TO COLLAGEN FIBERS THERE ARE OCCASIONAL THIN, STRAIGHT ELASTIC FIBERS. IN SKIN AREAS ADJACENT TO THE SCAR THE ELASTIC FIBERS ARE CLOSELY SET, FORMING TUFTS, AND THERE ARE ACCUMULATIONS OF LYMPH CAPILLARIES OF DEFORMED APPEARANCE WITH NUMEROUS LYMPHECTASES.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

3/3 020

UNCLASSIFIED

CIRC ACCESSION NO--AP0128481 PROCESSING DATE--13NOV70

ABSTRACT/EXTRACT--"OLD" SCARS OF THE DOG'S SKIN ARE ALMOST ENTIRELY MADE UP OF COMPACT BUNDLES OF COLLAGEN FIBERS. IN ADDITION TO OCCASIONAL LARGE BLOOD VESSELS, RARELY SEEN IN DEEPER STRATA OF THE SCAR, THERE ARE NUMEROUS LYMPH CAPILLARIES. THEY FORM PECULIAR NARROW MESHED NETWORKS IN THE SCAR. COMPENSATING READJUSTMENT OF LYMPH VESSELS ACCOMPANYING FORMATION AND MATURATION OF THE SCAR PROVES THE GREAT ADAPTIVE CAPACITY OF LYMPHATIC CIRCULATION OF THE DOG'S SKIN AND CONFIRMS THE OPINION OF ZHDANOV (1965) OF THE IDENTITY OF PRINCIPLES UNDERLYING NORMAL AND PATHOLOGIC MORPHOGENESIS IN THE LYMPHATIC SYSTEM. FACILITY: DEP. HUM. ANAT., I. M. SOCHENOV 1ST MOSCOW MED. INST., MOSCOW, USSR.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

UDC 595.771.421/576.8.06

USSR

SAUBENOVA, O. G., SADOVNIKOVA, T. P., DUBNITSKIY, A. M., and SINITSINA, L. P.,
Institute of Zoology, Academy of Sciences, Kazakh SSR, Alma-Ata

"Effect of Microbial Preparations on Mosquito Larvae of the Genus Culex in Southeastern Kazakhstan"

Leningrad, Parazitologiya, No 3, 1973, pp 227-230

Abstract: Five microbial preparations -- entobacterin, insectin. boverin, dendrobacillin, Bac. thuringiensis exotoxin -- were tested for their insecticidal effect on Culex modestus and Culex pipiens larvae in the laboratory and under field conditions (desert, semidesert, mountain). Insectin, boverin, and dendrobacillin proved to be ineffectual both in the laboratory and in the field. Entobacterin in a 1% suspension killed 79.5% of the larvae under desert and semidesert conditions, but the high cost of the preparation is disproportionate to the results obtained. And it exhibited much lower insecticidal activity in the mountains. Bac. thuringiensis exotoxin was the most effective in laboratory experiments. At a 0.1% concentration it killed 86% of the Culex pipiens larvae. Further testing of both entobacterin and exotoxin is suggested.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

1/2 018 UNCLASSIFIED PROCESSING DATE--30OCT70

TITLE--RESERVE CARBOHYDRATES OF YEASTS AS SUPPLEMENTAL CARBON RESOURCES IN PROTEIN BIOSYNTHESIS -U-

AUTHOR-(02)-SHAMIS, D.L., SAUBENOVA, M.G.

COUNTRY OF INFO--USSR

SOURCE--VESTN. AKAD. NAUK KAZ. SSR 1970, 26(2), 69-70

DATE PUBLISHED--------70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES

TOPIC TAGS--CARBOHYDRATE, YEAST, PROTEIN, BIOSYNTHESIS, GLYCOGEN

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1996/0451 STEP NO--UR/0031/70/026/002/0069/0070

CIRC ACCESSION NO--AP0117687

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

2/2 018 UNCLASSIFIED PROCESSING DATE--30OCT70

CIRC ACCESSION NO--AP0117687

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. CANDIDA TROPICALIS WITH ADDED N IN THE ABSENCE OF EXOGENOUS CARBOHYDRATES SHOWED INCREASED N CONTENT. IN ALL CASES, AN INCREASE OF CELL N CONTENT WAS ASSOCD. WITH MARKED REDN. OF GLYCOGEN STORAGE. IN SUCH YEAST, THE SYNTHESIS OF N CONTG. COMPDS. OCCURS AT THE EXPENSE OF THE ENDOGENOUS C SOURCE. YEAST CULTIVATED WITHOUT ADDNL. N HAD A LOWER N CONTENT, AND A HIGHER GLYCOGEN LEVEL.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

SAUKOV, A.S.

Yu. V. Vladimirov and A. I. Archakov. Perekiy[illegible] niye lipidov v biologicheskikh membranakh (Peroxidative Oxidation of Lipids in Biological Membranes). Moscow, 1972, [illegible] pages, 2000 copies, 1 r 60 k.

Zoologicheskiye problemy Sibiri (Zoological Problems of Siberia). Collection. Biological Institute, Siberian Department. Novosibirsk, 1972, 556 pages, 1000 copies, 4 r 92 k.

Ikhtioplankton i glubokovodnyye ryby okeana (Ichthyoplankton and Abyssal Fishes of the Ocean). Collection. Institute of Oceanology imeni P. P. Shirshov. Moscow, 1972, [illegible] pages, 1100 copies, 1 r 71 k.

M. F. Lomov and L. M. Nepomnyashchikh. Legkiye: dobavoyemnaya dolya neparnoy veny (The Lungs: The Lobulus Azygos). Novosibirsk, 1972, 144 pages with ill., 1300 copies 94 k.

G. I. Solov'yeva. Paraziticheskiye nematody drevesnykh i trayvenistykh rasteniy (Parasitic Nematodes of Woody and Grassy Plants). Zoological Institute and Institute of Biology of the Karelian Affiliate. Leningrad, 1972, 104 pages with ill., [illegible] copies, 89 k.

A. A. Khristo, V. V. Mochalov, and A. K. Chepikov. Sadovodstvo v Sibiri (Horticulture in Siberia). Novosibirsk, 1972, 278 pages with ill., 25,000 copies, 1 r 29 k.

Earth Sciences

Dinamicheskiye protsessy gornykh mashin (Dynamic Processes of Mining Machines). Collective Monograph. Institute of Mining imeni A. A. Skochinskiy. Moscow, 1972, 150 pages with ill., 1500 copies, 50 k.

I. M. Leneshkov and B. Ya. Rozen. Mineral'nyye dary mo[illegible] (Mineral Gifts of the Sea). Moscow, 1972, 120 pages, 13,000 copies, 37 k.

A. S. Saukov, N. Kh. Avdinyan, and N. A. Ozerova. Ocherk geokhimii rtuti (Outline of the Geochemistry of Mercury). Institute of the Geology of Ore Deposits, Petrography, Mineralogy, and Geochemistry. Moscow, 1972, 336 pages with ill., [illegible] copies, 1 r 72 k.

Teploobmen v magmatogennykh protsessakh (Heat Exchange in Magmatogenic Processes). Institute of Geology and Geophysics of the Siberian Department. Novosibirsk, 1972, 124 pages, 1300 copies, 1 r.

JPRS 57307
20 Oct 72

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR

SAULIS, L.

"A Local Limit Theorem for a Distribution Density in R^k"

Lit. Mat. Sb. [Lithuanian Mathematics Collection], 1972, Vol 12, No 4, pp 195-205 (Translated from Referativnyy Zhurnal Kibernetika, No 4, 1973, Abstract No 4V45, by the author).

Translation: A study is made of $\{\xi_j\}$ $(j = 1, 2, \ldots)$, a sequence of independent, k-dimensional random vectors in Euclidean space R^k with $M\xi_j = 0$, $\sigma_j^2 = \sum_{l=1}^{k} M\xi_{jl}^2 = n$ and limited densities $p_j(x) \leq A_j$, $j = 1, 2, \ldots$.

We represent

$$S_n = \sum_{j=1}^{n} \xi_j, \quad B_n^2 = \sum_{j=1}^{n} \sigma_j^2, \quad D_n = MS_n' S_n,$$

S_n' is a transposed vector, $|x|$ is the length of vector x, $Y_n = S_n K_n$, $u_n(x)$ is the density of random vector Y_n.

1/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR

Saulis, L., Lit. Mat. Sb., 1972, Vol 12, No 4, pp 195-205.

Here matrix K_n is such that $K_n' D_n K_n = I$, where K_n' is the transposed matrix, I is a unit matrix.

This work presents sufficient conditions that

$$\sup_x (1+|x|^2)\left|u_n(x) - \frac{1}{(2\pi)^{k/2}} e^{-\frac{|x|^2}{2}}\right| \to 0, \quad n \to \infty.$$

A similar result is produced with different normalization of random vector S_n.

2/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR

SAULIS, L. I.

"Asymptotic Expansion for Distribution Density of Sums of Independent, Non-identically Distributed Multidimensional Random Quantities"

Lit. mat. sb. [Lithuanian Mathematics Collection], Vol 11, No 3, 1971, pp 651-663, (Translated from Referativnyy Zhurnal, Kibernetika, No 3, 1972, Abstract No 3 V27 by the author).

Translation: Suppose $\xi_j = (\xi_{j1}, \xi_{j2}, \ldots, \xi_{jk})$, $j = 1, 2, \ldots, n$ are independent random quantities with values in R_k having zero means and finite moments of integer order $s \geq 3$, each of which has density $p_j(x) \leq A_j < \infty$. Let us represent:

$$\sigma_{jl}^2 = M\xi_{jl}^2,\ B_{nl}^2 = \sum_{j=1}^{n} \sigma_{jl}^2,\ l = 1, 2, \ldots, k,\ |\sigma_j| = \left(\sum_{l=1}^{k} \sigma_{jl}^2\right)^{\frac{1}{2}},$$

$$S_n = \sum_{j=1}^{n} \left(\frac{\xi_{j1}}{B_{n1}}, \frac{\xi_{j2}}{B_{n2}}, \ldots, \frac{\xi_{jk}}{B_{nk}}\right),$$

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR

SAULIS, L. I., Lit. mat. sb., Vol 11, No 3, 1971, pp 651-663.

V is the covariation matrix of vector θ with distribution function

$$F(x)=\frac{1}{n}\sum_{j=1}^{n}F_j\left(\frac{B_n x}{\sqrt{n}}\right),$$

where

$$\frac{B_n x}{\sqrt{n}}=\left(\frac{B_{n1}x_1}{\sqrt{n}},\frac{B_{n2}x_2}{\sqrt{n}},\ldots,\frac{B_{nk}x_k}{\sqrt{n}}\right),$$

while $F_j(x)$ is the distribution function of random vector ξ_j. For distribution density $p_n(x)$ of the normalized sum S_n, when the following conditions are fulfilled: 1) covariation matrix V is nondegenerate; 2) there is a finite number M, such that for all j = 1, 2, ..., n

$$|\sigma_j|^{2k}A_j^2<M,$$

2/3

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR

SAULIS, L. I., Lit. mat. sb., Vol 11, No 3, 1971, pp 651-663.

the asymptotic expansion with respect to powers of $1/\sqrt{n}$ is produced with a precise estimate of the residual term.

3/3

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR

UDC: 519.21

SAULIS, L. I., Institute of Physics and Mathematics, Academy of Sciences of the Lithuanian SSR

"Asymptotic Expansion for the Probability Density Function of Sums of Independent, Identically Distributed, Multidimensional Random Quantities"

Vil'nyus, Litovskiy Matematicheskiy Sbornik, Vol 11, No 3, 1971, pp. 651-663

Abstract: Let $\xi_j=(\xi_{j1}, \xi_{j2}, \ldots, \xi_{jk})$, $j=1, 2, \ldots, n$ be independent random quantities with values in R_k having zero averages and finite moments of integral order $s \geqslant 3$, each of which has density $p_j(x) \leq A_j < \infty$. Let us introduce the notation

$$\sigma_{jl}^2=M\xi_{jl}^2, \quad B_{nl}^2=\sum_{j=1}^{n} \sigma_{jl}^2, \quad l=1, 2, \ldots, k, \quad |\sigma_j|=\left(\sum_{l=1}^{k} \sigma_{jl}^2\right)^{\frac{1}{2}}, \quad S_n=\sum_{j=1}^{n}\left(\frac{\xi_{j1}}{B_{n1}}, \frac{\xi_{j2}}{B_{n2}}, \ldots, \frac{\xi_{jk}}{B_{nk}}\right).$$

V is the covariation matrix of vector Θ with distribution function

$$F(x)=\frac{1}{n}\sum_{j=1}^{n} P_j\left(\frac{B_n x}{\sqrt{n}}\right).$$

1/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR

SAULIS, L. I., Litovskiy Matematicheskiy Sbornik, Vol 11, No 3, 1971, pp. 651-663

where

$$\frac{B_n x}{\sqrt{n}} = \left(\frac{B_{n1} x_1}{\sqrt{n}}, \frac{B_{n2} x_2}{\sqrt{n}}, \ldots, \frac{B_{nk} x_k}{\sqrt{n}}\right),$$

and $F_j(x)$ is the distribution function of the random vector ξ_j. An asymptotic expansion in powers of $\frac{1}{\sqrt{n}}$ is found with exact evaluation of the residual term for the probability density function $p_n(x)$ of the normalized sum S_n with satisfaction of the condition: 1) the covariation matrix V is nondegenerate, 2) there exists a finite number M such that $|\alpha_j|^k \Lambda_j \leq M$ for all $j = 1, 2, \ldots, n$. Bibliography of nine titles.

2/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR

UDC: 539.107

NOVIKOV, I. A., SAULIT, V. R.

"Relation Between the Instrumental Line Shape of a Spectrograph and its Ion-Optical Parameters (Point Source). I"

Leningrad, Vestnik Leningradskogo Universiteta, Fizika i Khimiya, Vol 16, No 3, Aug 72, pp 46—54

Abstract: The paper is devoted to determining how the instrumental line shape of a spectrograph depends on its ion-optical parameters (on the order of focusing). The problem is solved as applied to spectrographs without axial focusing with sources of relatively low height. In this case the analysis can be limited to flat beams, which appreciably facilitates solution of the problem. In the first part of the article an investigation is made of line shape in instruments with a point source and even-order focusing. The case of odd-order focusing will be taken up in the second part of the work.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR

UDC 621.311.25:621.039.56

GREBEN'KOV, ZH. A., SAUNIN, YE. V., TOKAR', M. S.

"System for All-around Automation of a High-Power Atomic Electric Power Plant based on a Control Computer"

Dissotsiiruyushch. gazy kak teplonositeli i rab. tela energ. ustanovok -- V sb. (Dissociating Gases as Heat Transfer Agents and the Working Medium of Power Plants -- Collection of Works), Minsk, Nauka i Tekhn. Press, 1970, pp 131-137 (from RZh-Elektrotekhnika i Energetika, No 5, May 1971, Abstract No 5U128)

Translation: A basis is provided for the necessity of constructing an all-around automation system for high-power atomic electric power plants based on the control computer, and the basic principles of constructing this system on the basis of one of the models of the aggregate system of computer devices are presented. The bibliography has 13 entries.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

G. A. Sauridi, E. S. Verdish (engineers)

"A Method of Manufacturing Logic Elements"

Moscow, Pribory i sistemy upravleniya, No 9, Sep 70, p 52

Translation: Semiconductor logic and functional elements are extensively used in industrial automation and telemechanics.

Independent development and manufacture of these elements by many organizations leads to unnecessary variety of design and manufacturing technology.

At present, the ET standard series of transistor elements and its modified design series designated "Logika" are in production. Both series include logic functional elements, time elements, and output amplifiers.

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

The technological process for the preparation of ET and Logika elements (Fig. 1) consists of soldering the circuit components on a getinaks foil board (1) with printed circuitry terminating on one side in pin leads (2) for wiring or plug-in connection. The plate with the circuitry in a special carbolite housing (4) is placed perpendicular to the base backing (3), and the unit is filled with an epoxy compound (5) for protection against ambient media.

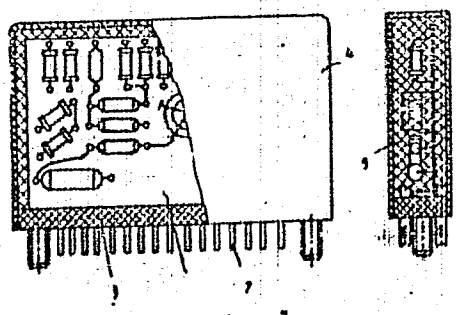


Fig. 1

2/4

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

Deficiencies of the production technology of the ET and Logika elements are their large size, inefficient utilization of space by purchased semiconductor parts, technologically unjustified use of the printed circuit board and of a large quantity of auxiliary parts, and the inefficient arrangement of the semiconductor elements on the board.

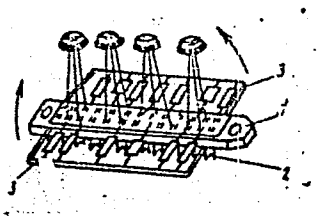


Fig. 2

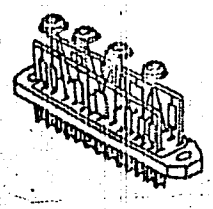


Fig. 3

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

These deficiencies were eliminated through the use of a new technological method of construction and manufacture of the element. Thus, if board 1 with leads 2 (fig. 2) is assembled and the component parts are located in two special circuit subassemblies 3, and a row of parts (usually transistors) are located vertically directly on the leads of the base board; it is then possible to have a good solid solder joint by connecting the two circuit subassemblies. After the assembly has been completed, the two outward subassemblies [3] are rotated around the horizontal axis to a vertical position for maximum utilization of space. The element is then sent to quality control for wiring inspection. It is then considered ready for potting (Fig. 3).

The use of the new manufacturing technology for semiconductor logic and functional elements made it possible to produce the device of half the size of the previous one while at the same time consolidating the circuitry and shortening the length of wiring and reducing the labor input in the manufacture of the element (by 33-50%).

4/4

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

1/2 013 UNCLASSIFIED PROCESSING DATE--11SEP70

TITLE--SYNTHESIS AND STUDY OF THIOUREAS. VI. 3,AMINOMETHYL, 4,4',DIALKOXYTHIOCARBANILIDES -U-

AUTHOR--SAUSINS, A., GRINSTEYNS, V.

COUNTRY OF INFO--USSR

SOURCE--LATV. PSR ZINAT. AKAD. VESTIS. KIM. SER. 1970, (1), 85-9

DATE PUBLISHED--------70

SUBJECT AREAS--CHEMISTRY

TOPIC TAGS--CHEMICAL SYNTHESIS, CATALYTIC HYDROGENATION, THIOUREA, AROMATIC NITRO COMPOUND, BENZENE DERIVATIVE

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1987/1064 STEP NO--UR/0464/70/000/001/0085/0099

CIRC ACCESSION NO--AP0104462

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

UNCLASSIFIED PROCESSING DATE--11SEP70

2/2 013

CIRC ACCESSION NO--AP0104462

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. MICROFICHE OF ABSTRACT CONTAINS GRAPHIC INFORMATION. I.HCL IN ETOH WERE HYDROGENATED AT ROOM TEMP. AND 1 ATM. OVER ADAMS CATALYST, AND THE PRODUCT SOLNS. TREATED WITH 1.2 EQ. R PRIME3 C SUB6 H SUB4 NCS TO GIVE THE FOLLOWING II.HCL (R, R PRIME1, R PRIME2 (OR NR PRIME1 R PRIME2), R PRIME3, M.P., AND PERCENT YIELD GIVEN): ME, MORPHOLINO, H (III), 176-9DEGREES, 64; ME, PIPERIDINO, H, 197-9DEGREES, 72; ME, PIPERIDINO, OET (IV), 164-5DEGREES, 56; ME, ET, ET, H, 165-7DEGREES, 61; ME, ET, ET, OET, 169-71DEGREES, 77; ME, ET, ET, BUO, 155-8DEGREES, 70; ME, ET, ET, N-C SUB5 H SUB11 O, 130-2DEGREES, 83; ME, ET, ET, N-C SUB6 H SUB13, 137-9DEGREES, 86; ET, ET, ET, OET, 149-53DEGREES, 72; ET, ET, ET, BUO, 160-3DEGREES, 76; ET, PIPERIDINO, N-C SUB5 H SUB11 O, 172-4DEGREES, 75. III AND IV GAVE FREE AMINES, M. 164-5DEGREES AND 144-5DEGREES, RESP.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2

USSR

UDC 669.293:669.77-.21

PAVLOV, I. M., RYNOV, V. A., SAUTIN, Yu. I., IZOTOV, V. M., KHICHEVSKIY, Ye. M., YEL'CHANINOV, V. N., and NEMTSOV, A. S.

"Some Problems in the Manufacture of Welded Pipes"

Moscow, Tsvetnyye Metally, No 3, Mar 70, pp 50-52

Abstract: The cost of seamless pipe from niobium and its alloys is high due to the low percentage of pipe fit for service (10--15%). The present study describes a more economical production technology for thin-walled pipe from a shell. Niobium ingots alloyed with titanium and zirconium were used as the starting material. The mechanical properties of the plates and the electron-beam welding parameters are given in tabular form. The mechanical test data show that preliminary vacuum annealing of the parent metal slightly reduces the strength properties (by 12--15%) and considerably increases elongation per unit length (1.5 to twofold). The strength properties of the welds are somewhat lower than those of the parent material whereas elongation per unit length remains at the same level. Metallographic analysis revealed coarse-grained dendritic structure (for the weld area) with dark inclusions. The microhardness is the same in both the weld and parent metal and ranges from 270 to 330 kg/mm^2. The microhardness of electron-beam welds is about the same as that of argon-arc welds. Prior to

1/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202810013-2"