"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

USSR

UDC 621.165.533.6

DEYCH, M. Ye., LAZAREV, L. Ya., and NITSKEVICH, V. P.

"On Edge Losses in Turbine Nozzle Lattices"

Kazan', IVUZ Aviatsionnaya Tekhnika, No 4, 1971, pp 67-72

Abstract : Experimental investigation results of edge losses in turbine nozzles, depending on the edge thickness, are discussed by reference to diagrams showing the losses measured at different distances from the edge and effects of M and Re. Based on a detailed study of the flow leveling process behind edges of different thickness and by different values of M and Re, recommendations are given for the selection of the distance of the measuring plane from outlet edges. An empirical formula which considers the edge thickness and M is presented for the determination of the coefficient of edge losses. Five illustr., two biblio. refs.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

USSR UDC 616.006.6

LAZAREV, N. I., Professor, Head of the Laboratory of Experimental Endocrinology, Institute of Experimental and Clinical Oncology, Academy of Medical Sciences USSR

"Dyshormonal Etiology of Cancer. A biologist's Conception of the Disease"

Moscow, Priroda, No 9, 1971, pp 9-23

Abstract: The validity of the currently prevailing theory that the origin and development of malignancies is largely due to environmental cancerogenic factors is questioned, and the theory of the dyshormonal etiology of cancer is advanced. The latter theory is substantiated by citing some of the successes already attained with the application of hormonotherapy in the case of tumors of the mammary, prostate, and thyroid glands, corpus uteri, adrenals, larynx, melanomas, and other hormone-related tumors comprising about one-third of all of the tumors which affect humans. At the basis of the theory of dyshormonal origin of tumors are the processes of cell division, differentiation, dedifferentiation, hyperplasia, anaplasia or undifferentiation, and finally possible development of tumorous tissue. Dying cells of hormone-producing glands or organs are normally replaced by new cells which after attaining their full development cease to divide and assume their differential functions. Under

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LAZAREV, N. I., Priroda, No 9, 1971, pp 9-23

certain conditions of malfunction of the hormone-producing organs the new cells fail to assume their functions, become dedifferentiated, and continue their propagation. It is one of the premises of cytology that a proliferating cell is not a functioning cell, and it is natural to assume that in the course of its uninterrupted propagation from generation to generation it becomes undifferentiated with the result that an atypical or cancerous form of tissue develops. On the basis of this theory cancerous cells are highly undifferentiated cells which because of their undifferentiation become malignant. There is also the possibility that a malfunctioning hormone-producing organ upsets the interorgan hormone-producing balance with the result that an overproduction of some other hormone takes place, and unless checked can be the cause of the development of cancer. Laboratory tests established that in most cases of the development of cancer there is a prolonged latent period and the development of precancerous tissue, and that the early recognition of these factors and the prompt stimulation of the malfunctioning organs or alleviation of the malfunctions can serve as a method of prophylaxis, and can also provide a basis for hormone therapy of cancerous tissues. The latter action is based on the fact that cancerous cells of dyshormonal tumors are not independent and autonomous cells, but cells which retain the physiological

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LAZAREV, N. I., Priroda, No 9, 1971, pp 9-23

reactivity properties regulating the functions of normal noncancerous cells, and therefore react to either stimulating or depressing action on their propagation. The dyshormonal theory of the origin, development, and treatment of cancer is not offered as a panacea for all cases of the disease, for cancer is not a single disease which can be cured by a single drug; it consists of a large group of tumorous diseases. Dyshormonal cancerogenesis, in the author's opinion, is the way which will lead to general-biological conception of the origin and development of cancer.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

1/2 029 UNCLASSIFIED PROCESSING DATE--02OCT70

TITLE--ADRENOCORTICAL STEROID HORMONE METABOLITES IN THE URINE OF PATIENTS WITH PULMONARY CARCINOMA --U-

AUTHOR-(02)-SMIRNOVA, K.D., LAZAREV, N.I.

COUNTRY OF INFO--USSR

SOURCE--VESTNIK AKADEMII MEDITSINSKIKH NAUK SSSR VOL 25, NR 2, 1970, PP 35-38

DATE PUBLISHED--------70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES

TOPIC TAGS--LUNG, CARCINOMA, URINE, ACTH, AIR POLLUTION, INDUSTRIAL HYGIENE, ADRENAL CORTEX, HYDROCORTISONE

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1986/0697 STEP NO--UR/0248/70/025/002/0035/0038

CIRC ACCESSION NO--AP0102681

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2/2 029 UNCLASSIFIED PROCESSING DATE--02OCT70

CIRC ACCESSION NO--AP0102681

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. IN VIEW OF THE RISE IN MORTALITY REFERABLE TO LUNG CANCER, THIS PROBLEM IS ACQUIRING PARTICULAR URGENCY. DETERMINATION OF THE ETIOLOGY OF THIS DISEASE IS THUS FAR PURSUED IN EXPERIMENTAL INVESTIGATIONS IN THE ASPECT OF RECOGNITION OF THE ETIOLOGICAL ROLE OF AIR POLLUTION BY PRODUCTS OF INCOMPLETE COMBUSTION OF SOLID, LIQUID AND GAS FUEL, AS WELL AS OF SMOKING AND WORKING UNDER ADVERSE CONDITIONS. HOWEVER, IF WE CONSIDER THAT ACCORDING TO CLINICAL DATA 8-9 OUT OF EVERY TEN VICTIMS OF LUNG CANCER ARE MEN, WE CANNOT TOTALLY RULE OUT THE POSSIBLE ROLE OF STEROID HORMONES, THE DISTINCTIVE FEATURES OF THEIR METABOLISM AND SECRETION. OUR PURPOSE WAS TO INVESTIGATE THE METABOLITES OF STEROID HORMONES OF THE ADRENAL CORTEX (FIRST OF ALL HYDROCORTISONE AND DEHYDROEPIANDROSTERONE) IN THE URINE OF LUNG CANCER PATIENTS.

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USSR

UDC 621.387

LAGAREV, N.F.

"Gas-Discharge Source Of Negative Ions"

USSR Author's Certificate No 258475, filed 9 Apr 68, published 17 Apr 70 (from RZh--Elektronika i yeye primeneniye, No 11, November 1970, Abstract No 11A150P)

Translation: The proposed gas-discharge source of negative ions contains a cathode and an anode. With the object of increasing the emission of negative ions from the source, diaphragms electrically isolated from the cathode and anode are successively mounted between the anode and cathode.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

USSR UDC 621.316.721.1

KOZODAYEV, A. M., LAZAREV, N. V.

"Thyristor Voltage Stabilizer for a 40-KV Modulator"

Moscow, Pribory i tekhnika eksperimenta, No 4, July-August 1970, pp 91-95

Abstract: The modulator in question is that used with an IT-600 pulse transformer feeding the pre-injector of a 25-Mev linear proton accelerator. The high-voltage circuit integrated into the stabilizer is a capacitive energy accumulator in which the voltage on the capacitors is stabilized by a three-phase thyristor-diode circuit connected in the primary winding of a power transformer in a wye arrangement with no zero conductor. The capacitor battery is charged by a high-voltage unregulated rectifier through a resistor, and contains 14 IM50-0.2 capacitors. Other circuit details and a complete schematic are given. The authors express their gratitude to I. M. Kapchinskiy and L. L. Gol'din for their useful comments, to L. V. Kartsev and V. I. Edemskiy for doing the electrical and mechanical work, and to B. M. Podvisotskiy and V. S. Skachkov for mounting and adjusting the equipment.

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USSR

UDC: 616.988.75(A2)-036.22(474.5)

RATMANAYTE, L. M., STEBLIVSKIY, P. P., LAZAREV, D. P., ZABULOTNOV, V. I., and KSHIVITSKAS, V. S., Vil'nius, Institute of Epidemiology, Microbiology, and Hygiene

"Characteristics of Immunological Shifts Among the Population of the Lithuanian SSR due to the Hong Kong Influenza Epidemic"

Moscow, Zhurnal Mikrobiologii, Epidemiologii, i Immunobiologii, Vol 48, No 6, Jun 71, pp 104-106

Abstract: The correlation between the intensity of influenza and the level of antihemagglutinins in the blood serum was studied. The 1969 epidemic, caused by influenza virus A2 Hong Kong 1/68, began in the second week of January and continued for 2 months. It was severe and distinguished by a large number of respiratory complications, surpassing in mass morbidity all of the influenza epidemics during the preceding decade. Serological investigation of 145 sera from members of organized collectives and 110 sera from the rest of the population, collected during November 1968, established the presence of antihemagglutinins only in a small number of sera with mean geometric titers of 1:14.8 and 1:9.8, respectively. During the epidemic the appearance of antihemagglutinins was accompanied by an increase of antibodies to virus A2-151/65.

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USSR

RATMANAYTE, L. M., et al, Zhurnal Mikrobiologii, Epidemiologii, i Immunobiologii, Vol 48, No 6, Jun 71, pp 104-106

This may be expalined as an anamnesticic response of the organism to a new virus variant. Serological investigations of sera obtained during the months of October-November, that is 8-9 months after the epidemic, established a low level of antihemagglutinins to virus A2 Hong Kong 1/68, with only 31.0% of the sera containing antibodies in a titer of 1:40 and higher. Higher titers of antibodies to virus A2 151/65 and V Dushanbe-66 were established in the sera. In all of the groups of sera studied, in the postepidemic period antihemagglutinins to the new antigenic variant of the virus were observed less often and also in titers lower than those to the preceding A2 virus variant.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

USSR

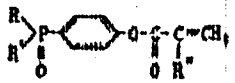
UDC 678.744.3-13

NIKOLAYEV, V. N., KOSTOCHKO, A. V., LAZAREV, R. A., Chuvash State University imeni I. N. Ul'yanov

"A Method of Making Polymers Containing Phosphorus and Nitrogen"

Moscow, Otkrytiya, Izobreteniya, Promyshlennyye Obraztsy, Tovarnyye Znaki, No 17, 1971, Author's Certificate No 304260, Division C, filed 20 Jan 1970, published 25 May 1971, pp 86-87

Translation: This Author's Certificate introduces a method of making polymers containing phosphorus and nitrogen. As a distinguishing feature of the patent, the variety of the resultant polymers is increased by copolymerizing alkyl esters of the general formula



where R and R' are alkyl, and R" is H_2CH_3, with an isocyanate selected from the group consisting of 2,4-toluylene diisocyanate and phosphorus-containing polyisocyanates of the general formula

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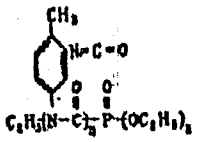
USSR

NIKOLAYEV, V. N., et al., Otkrytiya, Izobreteniya, Promyshlennyye Obraztsy, Tovarnyye Znaki, No 17, 1971, Author's Certificate No 304260, Division C



where n=7-8. The copolymerization is done in the presence of 2,4-diazobicyclo-2,2,2-octane as a catalyst.

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USSR

LAZAREV, S. D., SHEPEL'SKIY, G. A., and YEFREMOVA, G. N.

"Photomagnetic Effect Under the Strong Heating of Electrons by Light"

Leningrad, Fizika Tverdogo Tela, No 11, Nov 70, pp 3317-3319

Abstract: Stronger light than was used in previous experiments was applied to show that the ferromagnetic effect in n-In-Sb and n-InAs at helium temperatures is determined by the heating of electrons by light and is essentially the Nernst effect for hot electrons. Under weak light it was shown, for n-InSb at $T = 4°K$ and $n = 4 \cdot 10^{15}$ cm^{-3}, that $\Delta T(0)/T$, where T is the equilibrium electron temperature and ΔT is the nonequilibrium addition to it, exceeds $\Delta n(0)/n$ by at least a factor of 100; the authors hypothesize that by increasing the light signal, one could expect to achieve the case in which the change in temperature $\Delta T(x)$ was comparable with T and the change in concentration was still small. It would follow that such a case of nonlinear heating would be easier to achieve in degenerate samples when the effective energy transmitted by a photoelectron to the system of equilibrium particles should increase with an increase in the equilibrium concentration n. This could not be achieved under conditions of this

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USSR

LAZAREV, S. D., et al, Fizika Tverdogo Tela, No 11, Nov 70, pp 3317-3319

experiment with light intensities $I = 10^{17}$ quanta/cm^2·sec in degenerate samples with electron concentrations $n > 10^{15}$ cm^{-3}. With purer samples of n-InSb ($n = 10^{13}$-10^{14} cm^{-3} but still $\Delta n \ll n$) the heating of a smaller number of electrons and, naturally, a smaller light energy are required. The photomagnetic effect was measured as a function of light intensity at temperatures of 4.2° and 78°K. At helium temperatures there was observed a distinct nonlinear segment in the photomagnetic effect: the photomagnetic emf is saturated and then drops with an increase in light intensity. The intensity at which the nonlinear segment begins is a function of the magnetic field strength H.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

Acc. Nr: AP0038028

Ref. Code: UR 0056

PRIMARY SOURCE: Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki, 1970, Vol 58, Nr 1, pp 60-67

QUANTUM OSCILLATIONS OF PHOTOMAGNETIC EFFECTS AND PHOTOCONDUCTIVITY IN InSb AND InAs

Kikoin, I. K.; Lazarev, S. D.; Shepel'skiy, G. A.; Yefremova, G. D.

Quantum oscillations of photomagnetic phenomena in the degenerate semiconductors n-InSb and n-InAs are investigated in magnetic fields up to 50 kOe and temperatures between 1.8 and 4.2° K. At magnetic field strengths at which the photomagnetic e.m.f. changes sign (anomalous region) a pronounced nonlinear dependence of the photomagnetic effects on incident light intensity is observed under conditions of weak illumination ($\Delta n \ll n$). With increase of light intensity the photomagnetic e.m.f. passes through a maximum and then changes sign. Photoconductivity in a magnetic field was studied in the same samples. A negative photoconductivity in a transverse magnetic field was observed. A theoretical interpretation of the anomalous phenomena apparently requires that the role of not electrons be taken into account.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

1/2 029 UNCLASSIFIED PROCESSING DATE--23OCT70

TITLE--HOT ELECTRON PHOTOMAGNETIC EFFECT AND PHOTOCONDUCTIVITY -U-

AUTHOR-(03)-LAZAREV, S.D., SHEPELSKIY, G.A., YEFREMOVA, G.D.

COUNTRY OF INFO--USSR

SOURCE--FIZ. TEKH. POLUPROV. 1970, 4(2), 419-21

DATE PUBLISHED--------70

SUBJECT AREAS--PHYSICS

TOPIC TAGS--PHOTOMAGNETIC EFFECT, PHOTOCONDUCTIVITY, ELECTRON TEMPERATURE, INDIUM ANTIMONIDE SEMICONDUCTOR, CARRIER DENSITY, VOLTAGE STABILIZATION

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1988/0090 STEP NO--UR/0449/70/004/002/0419/0421

CIRC ACCESSION NO--AP0105176

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

2/2 029 UNCLASSIFIED PROCESSING DATE--23OCT70

CIRC ACCESSION NO--AP0105176

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE EFFECT OF ELECTRON HEATING IN THEPHOTOMAGNETIC EFFECT (V. ABAKUMOV, ET AL., 1968) WAS STUDIED FOR N INSB SAMPLES IRRADIATED WITH ULTRAHIGH FREQUENCY RADIATION IN THE PRESENCE OF A QUANTIZING MAGNETIC FIELD. IN THIS CASE, AN EMF. ORIGINATES WHICH IS UNEVEN ALONG THE MAGNETIC FIELD (PHOTOTHERMOMAGNETIC EFFECT) (A. VYSTAVKIN, ET AL., 1963). THE CHANGE IN THE VOLTAGE FOR THIS EFFECT OSCILLATES; THE PHASE AND PERIOD OF THE OSCILLATIONS ARE DETD. BY THE ELECTRON CONCN. A COMPARISON OF THE FIELD DEPENDENCE FOR THE PHOTOTHERMOMAGNETIC AND PHOTOMAGNETIC EFFECTS SHOWED THAT THE 2 CURVES ARE SIMILAR. THE CHANGE IN THE SIGNS OF THE EFFECTS OCCURS AT THE SAME VALUE OF THE FIELD. BOTH CURVES EXHIBITY A SPIN SPLITTING OF THE 1ST MIN.

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Acc. Nr.: AP0041291 L

R&E. Code: UR0209

UDC: None

USSR

KAMYSHOV, I., Lt. Col, Medical Science Graduate, and LAZAREV, V., Physician-Flyer

"Illusions Observed in Flight"

Moscow, Aviatsiya i Kosmonavtika, No. 1, 70, pp 37-38

Abstract: The section of the above-named journal in which this article appears is titled "Flight and Psychology." The article itself deals with sensory illusions of the flier, a consequence, according to the authors, of the transition from the ground of two dimensions to the air space of three, where man's sense organs are better adapted to the former than to the latter. At the present time, the point of view of vestibular illusions is most widespread. According to this point of view, man is oriented in space through his sense of vision, through the vestibular apparatus, by kinaesthetic, vascular, and internal organ signaling. In flight, 4

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however, the action of aerodynamic forces leads to distortions in the sense of gravitation direction; that, in turn, leads to the formation of a new complex of the senses in which vision is the most important factor. Where the pilot cannot see the horizon, his visual sense loses its predominating position to the vestibular sense, among others, and the result is such sensory illusions as mistaking the direction of banking or pitching. At the same time, the experimental evidence indicates that the occurrence of illusions does not depend on the sensitivity of the vestibular apparatus. The author describes an experiment in which he participated, testing the ability of a student pilot to maintain horizontal flight. In most cases, the plane took on a bank angle of 30° and varied in speed by 10 meters per second after only 10-15 seconds, with the instrument panel covered. The author suggests that the best way to cope with illusions of this kind is to publicize them thoroughly; he complains that although pilots note the appearance of these illusions and how they overcame them in answering their questionnaires, they do not always report them.

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A true report, he continues, will make it possible to clear up the cause of loss of control of the horizon, determine the source of false information, and work out a method for overcoming illusions so that other fliers in a similar situation can take advantage of the experience. He also recommends that fliers be trained with a curtain over the instrument panel to learn to determine their position after being disoriented. The purpose of this is to present the student with a perfectly new situation after the instructor has gone through some evolution so that he will learn to cope with it when the panel is unmasked again.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

USSR

UDC: 621.372.5

LAZAREV, V. A.

"Investigation of a Three-Transistor Gyrator Circuit"

Radioelektron. v nar. kh-ve SSSR. Ch. 2 (Radioelectronics in the National Economy of the USSR, Part 2) Kuybyshev, 1970, pp 399-399 (From Ref-Radiotekhnika, No. 3, March 71, Abstract No. 3A185)

Translation: An analysis is made of the circuit of a gyrator made on the principle of a parallel connection of two voltage-current converters, the first of which is a cascaded connection of a single-ended voltage converter, a conductance, and a single-ended current converter, while the second is realized on the basis of an amplifier-phase inverter with series negative current feedback. Three illustrations, bibliography of eight. [illegible]

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UDC: 621.374.4(069.8)

[illegible]

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

USSR UDC: 621.372.5

LAZAREV, V. A.

"Constructing Current Repeater Circuits"

V sb. vopr. elektrosvyazi (Problems of Electrical Communications--collection of works), Kiev, "Tekhnika", 1970, pp 157-162 (from RZh-Radiotekhnika, No 11, Nov 70, Abstract No 11A120)

Translation: The author substantiates a procedure for constructing current repeater circuits based on two-terminal-pair network theory. The duality between current repeaters and the voltage repeater makes it possible to use the procedure for constructing the latter. A repeater circuit is discussed which consists of a direct-transmission two-terminal-pair network and a feedback two-terminal-pair network. The requirements for the network parameters are determined. Construction of optimum one-, two- and three--transistor circuits is demonstrated. Four illustrations, bibliography of five titles. N. S.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

1/2 025 UNCLASSIFIED PROCESSING DATE--20NOV70

TITLE--DIFFUSION OF COPPER IN IRON AND ITS ALLOYS -U-

AUTHOR-(02)-LAZAREV, V.A., GOLIKOV, V.M.

COUNTRY OF INFO--USSR

SOURCE--FIZ. METAL METALLOVED. 1970, 29(3), 598-602

DATE PUBLISHED--------70

SUBJECT AREAS--MATERIALS

TOPIC TAGS--METAL DIFFUSION, IRON ALLOY, COPPER CONTAINING ALLOY, METALLURGIC RESEARCH FACILITY, SURFACE ACTIVE AGENT, BORON CONTAINING ALLOY, MOLYBDENUM CONTAINING, GRAIN BOUNDARY

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3001/0333 STEP NO--UR/0126/70/029/003/0598/0602

CIRC ACCESSION NO--AP0126089

UNCLASSIFIED

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

2/2 025 UNCLASSIFIED PROCESSING DATE--20NOV70

CIRC ACCESSION NO--AP0126089

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE TEMP. DEPENDENCE OF THE COEFF. OF VOL. DIFFUSION AND PARAMETERS BOUNDARY DIFFUSION OF CU WAS STUDIED FOR THE FOLLOWING 5 ALLOYS: PURE IRON (C 0.004, SI 0.02, MN 0.04, S 0.001, P 0.001PERCENT) FE PLUS 0.2PERCENT CU, FE PLUS 1.22PERCENT CU, FE PLUS 0.003PERCENT B, FE PLUS 1.0PERCENT MO AT 707-870DEGREES. SMALL ADDNS. OF CU, B, AND MO LOWERED THE DIFFUSION MOBILITY OF CU ALONG THE GRAIN BOUNDARIES. THE CU INCREASED THE ACTIVATION ENERGY OF BOUNDARY DIFFUSION. BY INTRODUCING INTO FE, SURFACE ACTIVE ELEMENTS SUCH AS B AND MO, NOT ONLY THE DIFFUSIONAL MOBILITY OF CU BUT ALSO THE CONCN. OF CU IN THE NEAR BOUNDARY ZONE DECREASE, WHEREBY THE PLASTICITY OF THE CU CONTG. IRON CAN BE IMPROVED. FACILITY: INST. METALLOVED. FIZ. METAL., MOSCOW, USSR.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

1/2 036 UNCLASSIFIED PROCESSING DATE--20NOV70

TITLE--CAVITATING JET FLOW OF FINITE WIDTH PAST A PLATE --U--

AUTHOR--LAZAREV, V.A.

COUNTRY OF INFO--USSR

SOURCE--AKADEMIIA NAUK SSSR, IZVESTIJA, MEKHANIKA ZHIDKOSTI I GAZA, JAN.-FEB. 1970, P. 127-133.

DATE PUBLISHED--------70

SUBJECT AREAS--MATHEMATICAL SCIENCES, PHYSICS

TOPIC TAGS--NONLINEAR THEORY, CAVITY FLOW, BOUNDARY LAYER FLOW, JET FLOW

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1992/1453 STEP NO--UR/0421/70/000/000/0127/0133

CIRC ACCESSION NO--AP0112447

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

2/2 036 UNCLASSIFIED PROCESSING DATE--20NOV70

CIRC ACCESSION NO--AP0112447

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. ANALYSIS OF THE NONLINEAR PROBLEM OF THE FLOW OF AN IDEAL WEIGHTLESS FLUID JET OF FINITE WIDTH PAST A SUPERCAVITATING PLATE AT INCIDENCE. USING TULIN'S SCHEME IN WHICH THE ACTUAL CAVERN IS REPLACED BY A SYSTEM OF DOUBLE SPIRAL VORTICES, ANALOGOUS BOUNDARY CONDITIONS ARE OBTAINED FOR THE LOGARITHMIC DERIVATIVE OF THE DIMENSIONLESS COMPLEX VELOCITY AT THE FREE SURFACE OF THE JET, THE CAVERN BOUNDARIES, AND THE WAKE BEHIND THE CAVERN. IT IS SHOWN THAT THESE BOUNDARY CONDITIONS MAKE IT POSSIBLE TO SOLVE THE SYMMETRIC FLOW PROBLEM UNDER STUDY. THE RESULTS OBTAINED ARE COMPARED WITH GUREVICH'S (1961) AND KUZNETSOV'S (1966) RESULTS FOR UNBOUNDED FLOWS.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

UNCLASSIFIED PROCESSING DATE--02OCT70

1/2 033

TITLE--CORROSION RESISTANCE OF A STEEL ALUMINUM CLAD METAL -U-

AUTHOR-(05)-LEVIN, A.I., ESHCHENKO, V.F., LAZAREV, V.F., ZASUKHA, P.F., KORSHCHIKOV, V.D.

COUNTRY OF INFO--USSR

SOURCE--ZASHCH. METAL. 1970, 6(1), 39-41

DATE PUBLISHED--------70

SUBJECT AREAS--MATERIALS, MECH., IND., CIVIL AND MARINE ENGR

TOPIC TAGS--CORROSION RESISTANCE, METAL CLADDING, COLD ROLLING, ALUMINUM, STEEL, BIMETAL

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

STEP NO--UR/0365/70/006/001/0039/0041

PROXY REEL/FRAME--1992/0751

CIRC ACCESSION NO--AP0111944

UNCLASSIFIED

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

UNCLASSIFIED PROCESSING DATE--02OCT70

2/2 033

CIRC ACCESSION NO--AP0111944

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. CORROSION RESISTANCE OF AL CLAD STEEL WAS TESTED IN 3PERCENT NACL AND 0.5PERCENT NAOH SOLNS. THE CLAD METALS (TOTAL THICKNESS 1.2 MM) WERE OBTAINED BY COLD ROLLING AND THEN ANNEALING AT 560 PLUS OR MINUS 10DEGREES FOLLOWED BY SLOW COOLING TO 200DEGREES. AL USED FOR THE CLADDING LAYER CONTAINED FE 0.1, CU 0.007, TI 0.003, AND MN 0.01PERCENT AND THE THICKNESSES OF THE CLADDING LAYERS WAS 20-25, 40-45, 89-90, AND 130-140 MU. THE RESISTANCE OF THE CLADDING METAL ALONE (1.2 MM THICK) WAS ALSO INVESTIGATED; STEADY STATE POTENTIALS WERE RECORDED FOR ALL CLAD METALS. THE MOST RESISTANT TO THE EFFECT OF THE MEDIUM WAS THE CLADDING METAL ALONE; DECREASE IN THE THICKNESS OF THE CLADDING METAL ALONE; DECREASE IN CLAD METAL CORROSION RESISTANCE: THIS CAN BE EXPLAINED BY THE PRESENCE OF SMALL AMTS. OF FE INCLUSIONS IN THE AL LAYER INTRODUCED MECH. DURING ROLLING AND BY DIFFUSION DURING HEATING.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

USSR UDC 577.4

LAZAREV, V. G., CHEMTSOV, V. M.

"Use of Stochastic Automata for Information Distribution"

V sb. Avtomaty, gibridn. i upravlyayushch. mashiny (Automata, Hybrid and Control Machines — collection of works), Moscow, Nauka Press, 1972, pp 66-72 (from RZh-Kibernetika, No 7, Jul 72, Abstract No 7V373)

No abstract

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USSR

LAZAREV, V. G.

"Questions of Data Distribution Control on Communication Networks"

Moscow, Diskretnyye Avtomaty i Seti Svyazi, 1970, pp 3-13

Abstract: The principal element of a communication system is the communication network. Depending on the type of channel and line connection used at the network center, communication networks are divided into cross-connection networks (non-switchable networks) and networks with channel and line switching (switchable networks). The centers of a switchable network are usually called switching centers. A network whose center effects the transmission (switching) of a message from an incoming channel (line) to an outgoing channel (line) via memory units is called a traffic switching network. A real network may use all three methods of data distribution simultaneously. The second element of the communication system is the equipment of the network center to

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

USSR

LAZAREV, V. G., Diskretnyye avtomaty i Seti Svyazi, 1970, pp 3-13

provide data distribution within the center, called the switching and cross-connection system. The third element of the communication system is the control system, the basic functions of which are dealt with in the present article.

The Institute of Information Transmission Problems (IPPI) of the Academy of Sciences USSR has modeled the process of data distribution on switchable networks with different channel-group loads and reliabilities using different service algorithms. The service performance criterion chosen was the probability of a failure to establish a connection between switching centers. The chosen criterion was found to depend significantly on the service algorithm. A control system which adjusts the data flow distribution plan according to the network situation is called dynamic control. A system which fails to provide this is called static control. The article considers only dynamic control. A control

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LAZAREV, V. G., Diskretnyye Avtomaty i Seti Svyazi, 1970, pp 3-13

system includes two types of control units. Network control units (NCU) analyze parameters characterizing the overall situation and determine the optimal data distribution plan which will provide the maximum traffic capacity and reliability of the communication network. The second type (connection control units or, simply, control units (CU)), if a request occurs, performs operations to establish each connection according to the conditions chosen by the NCU for satisfying requests and in accordance with the data distribution plan. The article considers the principal functions of NCUs for non-switchable, switchable, and traffic switching networks, with particular emphasis on the principles of constructing a decentralized system of dynamic data-distribution control for the latter two types of network.

The author concludes that the work done in the last few years on communication network data-distribution control, together

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

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LAZAREV, V. G., Diskretnyye Avtomaty i Seti Svyazi, 1970, pp 3-13

with the work on the synthesis of control unit structures, can serve as the basis for a communication network control theory, the principal problems of which should be:

1) the development of optimal control algorithms;

2) the creation of methods for choosing rational principles of control system construction;

3) the creation of methods for the synthesis of control unit structures.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

UDC: 577.4

USSR

LAZAREV, V. G., SEYFULLA, I. D.

"Cycle-by-cycle Realization of an Automaton"

Avtomaty i Upr. [Automata and Control--Collection of Works], Moscow, Nauka Press, 1972, pp 27-34 (Translated from Referativnyy Zhurnal Mekhanika, No 11, 1972, Abstract No 11V331 from the resume)

Translation: A cycle-by-cycle realization of automata is suggested in homogeneous media, based on time decomposition of the structure of the automata. The algorithm for functioning of the automaton (consisting of adjustment codes) is introduced to the control structure of the homogeneous medium, which constructs the circuit of the automaton alternately in two sectors of the homogeneous medium.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

Ref. Code: UR 0213

ACC. NR: AP0036439

PRIMARY SOURCE: Okeanologiya, 1970, Vol 10, Nr 1, pp 20-29

B. A. SHULYAK, S. M. ANTSYFEROV, S. P. KAZAKOV, N. K. KALININA, V. I. LAZAREV

THE DIFFERENTIAL CHARACTERISTIC OF THE ASYMMETRY OF ORBITAL VELOCITIES OF THE INFINITE-LENGTH WAVE STREAM

Summary

The experimental methods to study phase and orbital velocities of gravity waves in a ring-shaped channel are discussed. Data are presented on the differential characteristic of the asymmetry of orbital velocities for both the ring-shaped and the linear channels. A good coincidence with the formulae of Stockes and Longuet-Higgins has been obtained for the bottom layer only at the phase points $\theta_1 = \frac{\pi}{2}$ and $\theta_2 = \frac{3}{2}\pi$. The experimental data for other phase points and in particular for $\theta_1 = \pi$, disagree with the theory.

D.A.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

1/2 013 UNCLASSIFIED PROCESSING DATE--20NOV70

TITLE--SPECTROPHOTOMETRIC DETERMINATION OF ELEMENTAL SULFUR -U-

AUTHOR-(02)-LAZAREV, V.I., KOSTRIKOV, V.I.

COUNTRY OF INFO--USSR

SOURCE--ZH. ANAL. KHIM. 1970, 25(3), 553-5

DATE PUBLISHED--------70

SUBJECT AREAS--CHEMISTRY

TOPIC TAGS--SULFUR, ABSORPTION SPECTRUM, SPECTROPHOTOMETRIC ANALYSIS, TRICHLORICE, ETHYLENE

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3001/0462 STEP NO--UR/0075/70/025/003/0553/0555

CIRC ACCESSION NO--AP0126216

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

UNCLASSIFIED PROCESSING DATE--20NOV70

2/2 013

CIRC ACCESSION NO--AP0126214

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE ABSORPTION SPECTRUM OF ELEMENTAL S IN TRICHLOROETHYLENE WAS STUDIED. A DIRECT SPECTROPHOTOMETRIC METHOD WAS DEVELOPED FOR THE ELEMENTAL DETN. OF S IN A TRICHLOROETHYLENE SOLN. IN THE PRESENCE OF O COMPDS. OF S. THE ABSORPTION IS MEASURED AT 264 NM. FACILITY: STATE SCI.-RES. INST. IND. SANIT. PURIF. GASES, MOSCOW, USSR.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

1/2 024 UNCLASSIFIED PROCESSING DATE--13NOV70

TITLE--FIELD ELECTRON EMISSION OF CYLINDRICAL CATHODES -U-

AUTHOR-(03)-VOLOSOV, V.I., LAZAREV, Y.N., TERYAYEV, V.YE.

COUNTRY OF INFO--USSR

SOURCE--ZH. TEKH. FIZ. 1970, 40(4), 855-8

DATE PUBLISHED--------70

SUBJECT AREAS--CHEMISTRY

TOPIC TAGS--ELECTRON EMISSION, TUNGSTEN, MOLYBDENUM, VOLT AMPERE CHARACTERISTIC, CATHODE

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAME--2000/1979 STEP NO--UR/0057/70/040/004/0855/0858

CIRC ACCESSION NO--AP0126568
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UNCLASSIFIED PROCESSING DATE--13NOV70

2/2 024

CIRC ACCESSION NO--AP0125568

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE FIELD ELECTRON EMISSION OF G-8 MO W AND MO WIRES WITHOUT ANY OXIDE SURFACE FILM MOUNTED IN THE AXIS OF A 10-MM-DIAM. CYLINDRICAL TA ANODE (15 MM LONG) WAS STUDIED IN VACUUM OF 10 PRIME NEGATIVE4-10 PRIME NEGATIVE9 TORR VOLT AMPERE (V-A) CHARACTERISTICS ARE SHOWN. DISCONTINUITIES ARE FOUND IN THESE V-A CHARACTERISTICS, WHICH LEAD TO HYSTERESIS REGIONS IN THE CURVES. THE TIME DEPENDENCE OF THE FIELD EMISSION CURRENT IS PLOTTED. AT SMALL CURRENTS, A CURRENT INCREASE IS OBSD. IN THE 1ST HR, AND AT CURRENTS LARGER THAN 1 MA A DECREASE OCCURS IN THE 1ST HR. THE EMISSION OBSD. IS SOME ORDERS HIGHER THAN THAT CALCD. BY THE FOWLER NORDHEIM THEORY. THE PHENOMENA OBSD. MAY BE ATTRIBUTED TO MICRODEFORMATIONS OF THE CATHODE SURFACE UNDER THE ACTION OF THE ELEC. FIELD. PHOTOMICROGRAPHS OF FIELD EMISSION CATHODES AFTER OPERATION SHOW SUCH DEFORMATIONS.

FACILITY: INST. YAD. FIZ., NOVOSIBIRSK, USSR.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

USSR UDC 535.242.2

LAZAREV, V. P., UKHANOVA, Z. I.

"The FM-99 Photometer Attachment"

Leningrad, Optiko Mekhanicheskaya Promyshlennost', No 3, 1973, pp 21-25.

Abstract: The new FM-99 photometer attachment is described. This device has greater sensitivity in the ultraviolet area of the spectrum than the older FM-59 photometer attachment, and allows measurement of integral reflection factors by the absolute method (without comparison standards). A photograph, diagram of the optical system of the photometer and curves of the spectral sensitivity of the device are presented. Tests have shown that the reproducibility of measurements is ±1% (abs.). The device weighs 4.5 kg and is 0.5 m long, making it easily portable.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

USSR

UDC 535.853.36

GUREVICH, M. M., Doctor of Sciences, LAZAREV, V. P.

"Instrument for Measuring the Photometric and Spectrophotometric Characteristics of Materials in the 0.3-2 Micron Range"

Leningrad, Optiko-mekhanicheskaya promyshlennost' No 11, Nov 71, pp 34-37

Abstract: This article presents a description of a FM-85 photometer intended for rapid determination (few minutes) of integral and spectral reflection coefficients of materials and also integral and spectral transmission coefficients of transparent materials. It was developed, tested and accepted for industrial use at the Zagorsk Optical Instrument Factory (ZOMZ). Measurements can be conducted in the 0.3-2.5 micron range, both in monochromatic and in complex light fluxes of arbitrary spectral content. A schematic diagram and a photograph of the instrument are presented. Formulas are derived for reflexion and transmission coefficients. Indications for instrument adjustment are given, and measuring techniques are described.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

1/2 014 UNCLASSIFIED PROCESSING DATE--04DEC70

TITLE--SPARK COUNTER FOR FISSION FRAGMENTS -U-

AUTHOR-(05)-GANGRSKIY, YU.P., DALKHSUREN, B., LAZAREV, YU.A., MARKOV, B.N., NGUYEN, C.H.

COUNTRY OF INFO--USSR

SOURCE--PRIB. TEKH. EKSP. 1970, (2), 63-5

DATE PUBLISHED--------70

SUBJECT AREAS--PHYSICS

TOPIC TAGS--NUCLEAR FISSION, SPARK CHAMBER, NUCLEAR PHYSICS APPARATUS

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3008/2016 STEP NO--UR/0120/70/000/002/0063/0065

CIRC ACCESSION NO--AP0138870

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

2/2 014 UNCLASSIFIED PROCESSING DATE--04DEC70

CIRC ACCESSION NO--AP0138870

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. RESULTS ARE GIVEN OF MEASUREMENTS OF THE EFFICIENCY OF REGISTRATION FOR FISSION FRAGMENTS AND OF THE RESOLVING TIME FOR SEVERAL GAS MIXTS. BASED ON HE, NE, AR, KR, XE, AND N SUB2. FOR A SERIES OF GAS MIXTS., AN EFFICIENCY OF LESS THAN OR EQUAL TO 50PERCENT WAS OBTAINED FOR THE FRAGMENTS, AND FOR ALPHA PARTICLES, IT WAS LESS THAN 10 PRIME NEGATIVE 10PERCENT. FACILITY: OB"EDIN. INST. YAD. ISSLED., DUBNA, USSR.

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JPRS 58011

15 Jan 73

Transuranium Elements

IN THE COMMITTEE FOR INVENTIONS AND DISCOVERIES UNDER THE COUNCIL OF MINISTERS USSR

[Announcement; Moscow, Vestnik Akademii Nauk SSSR, Russian, Vol 42, No 11, November 1972, pp 132-133]

The Committee has registered the following scientific discoveries:

G. N. FLEROV, YU. TS. OGANESIAN, YU. V. LOBANOV, YU. A. LAZAREV, Czechoslovak citizen J. ZVARA, V. Z. BELOV, V. A. DRUIN, A. G. DEMIN, AND YU. P. KHARITONOV.

"ELEMENT NO. 105 OF MENDELEYEV'S PERIODIC SYSTEM"

Formulation of the discovery: Experimentally established was the previously unknown phenomenon of formation of a chemical element with the ordinal number 105. An isotope of that element with a half-life $T_{1/2} \approx 2$ seconds was obtained during the irradiation of americium with neon nuclei.

Priority of discovery -- 18 February 1970.

Certificate No. 114. Application No. OT-7896.

The data obtained by the authors of the discovery are of great scientific importance, as they show a divergence of the experimentally determined radioactive properties of element No. 105 from the previously predicted theoretically on the basis of known semi-empirical laws and require revision of the latter. The new experimental data relating to the synthesis of element No. 105 indicate a real possibility of the detection of heavier chemical elements in nuclear reactions, for example, No. 106, and permit much more confidently predicting the properties of those elements.

LAZAREV, Yu. A.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

USSR UDC 621.378.325:658.382.3

PRONIN, V. R., VYSOKOSOV, Ye. P., NESTERENKO, M. T., LAZAREV, Yu. I.

"Recommendations for Setting up Temporary Sanitary Rules for Working With Lasers"

Moscow, Kvantovaya Elektronika, No 2, 1971, pp 87-91

Abstract: The authors consider recommendations for setting up sanitary rules in working with lasers. The recommendations are based on analyzing current Soviet and non-Soviet data in the literature on problems of evaluating the biological effect, levels of threshold action and safe levels of laser emission from studies with consideration to the optical and physiological properties of the eye. Requirements for production areas where quantum electronic devices are located are also considered. One table, bibliography of 25 titles.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

USSR UDC 621.375.4

GOLITSYN, M. G., LAZAREV, Yu. V.

"Amplifier Device"

USSR Author's Certificate No 298065, Filed 11/03/68, Published 5/05/71, (Translated from Referativnyy Zhurnal Avtomatika, Telemekhanika i Vychislitel'naya Tekhnika, No 11, 1971, Abstract No 11 A124 P).

Translation: An amplifier device is suggested for an automatic control circuit, containing a transformer, stabilitrons, an RC circuit, and thyristors. In order to increase the reliability of the device, a series connected stabilitron and resistor are connected in parallel to each of the secondary windings of the transformer, and the stabilitrons are connected through resistors to the inputs of the amplifier device. 1 Figure.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

UDC: 681.3.06:51

USSR

VLASOV, N. L., LAZAREVA, I. A., and SIGAL, I. Kh.

"Approximating Tabular Functions of Two Variables"

Kiev, V sb. Mashiny dlya inzh. raschetov (Machines for Engineering Calculations--collection of works) No 7, 1973, pp 45-56 (from RZh--Avtomatika, telemekhanika i vychislitel'naya tekhnika, No 12, 1973, Abstract No 12B97)

Translation: Most of the algorithms for approximating tabular functions of two variables developed at the present time are limited to the construction of a polynomial of fixed degree in two variables: problems of approximation with a specified accuracy remain practically untouched. It is shown that in the construction of these algorithms, it is best to use two-dimensional orthogonal polynomials.

Use of such polynomials permits construction of an effective computational algorithm, the meaning of which is that in each last step all the results of the preceding computation are preserved. This last statement is especially important in view of the low operation speed and limited memory of the MIR type of computer.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

USSR

VLASOV, N. L., et al., V sb. Mashiny dlya inzh. raschetov, No 7, 1973, pp 45-56

A description is given of the program "Approximation of a function of two variables by the method of least squares through orthogonal polynomials of a specified accuracy." Its program and operational order are given. A control example of the computations on the MIR-2 type of computer is presented. Bibliography of three. N. V.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

UDC 621.315.592

USSR

KYUREGYAN, A. S., LAZAREVA, L. E., STUCHEBNIKOV, V. M., YUROVICH, A. E.

"Photoluminescence of Gallium Antimonide at a High Excitation Level"

Leningrad, Fizika i Tekhnika Poluprovodnikov, Vol 6, No 2, 1972, pp 242-247

Abstract: The radiation recombination in GaSb under laser excitation was investigated. With an increase in the excitation power to 10^3-10^5 watts/cm^2, new shortwave bands appear in the spectra. The width of the forbidden band of GaSb defined by the peak energy of the interband (exciton) radiation is 0.813 ± ± 0.003 electron volts at 12° K and 0.800 ± 0.005 electron volts at 80° K. In the case of weak alloying of the GaSb with tellurium, recombination occurs in the spectra with the participation of natural acceptors (0.034 and 0.070 electron volts), deep acceptors (0.10 and 0.13 electron volts) and a shallow donor (0.01 electron volts). The effect of the temperature variation, degree of alloying and excitation level on the form of the photoluminescent spectra is discussed. The results are compared with data obtained by one of the authors [V. M. Stuchebnikov, Author's Review of Candidates Dissertation of Moscow State University, Moscow, 1969] for a comparatively low excitation level by a He-Ne-laser.

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USSR

UDC: 621.315.592

LAZAREVA, I.K. and STUCHEBNIKOV, V.M.

"Photoluminescence of GaSb Alloyed with Te"

Leningrad, Fizika i Tekhnika Poluprovodnikov, Vol 4, No 4, 1970, pp 649-653

Abstract: An experimental article describing experiments performed to study radiative transitions in semiconductors which, as the authors assert, permit gathering valuable information concerning the energy spectrum of the crystal. The subject of this study is degenerate n-type GaSb alloyed with tellurium. The study shows that the radiation transitions go from the conductivity zone to a deep acceptor level. However, the widening of the level due to increased alloying does not permit using radiation spectra to determine the form of density distribution of the states close to the conductivity zone. The photoluminescence spectra were obtained at 12 and 77° K. Recombination radiation was excited by gas lasers of the LG-35 or LG-126 type with wavelengths of 0.63 and 1.5 microns, the radiation excitation power being approximately 5 watts/cm^2. An ADP crystal was used to quench the laser parasitic radiation in the 0.6-0.8 electron-volt range. Recording of the radiation was done by a device using the IKS-12 spectrometer, with a PbS photoresistor as the radiation sensor. The article presents five curves, one of which shows how [illegible] in the direction of increasing energy with increasing con-

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centrations of the tellurium alloy. The authors express their gratitude to

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USSR

LAZAREVA, I.K., et al., Fizika i Tekhnika Poluprovodnikov, Vol 4, No 4, 1970, pp 649-653

A.E. Yunovich and L.V. Keldysh for their assistance, and to V.M. Karneyev for obtaining the spectra.

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APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

USSR UDC 616.981.553-07:616.833-091.93-003.93

MIKHAYLOV, V. V., MIKHAYLOVA, S. D., and LAZAREVA, K. P., Chair of Pathological Physiology imeni A. A. Bogomolets, Saratov Medical Institute

"The Mechanism of Disrupted Regeneration of Large Myelinated Nerve Fibers in Botulism"

Moscow, Byulleten' Eksperimental'noy Biologii i Meditsiny, Vol 27, No 8, 1971, pp 21-24

Abstract: Experiments performed on healthy frogs (Rana ridibunda) and botulinus intoxicated frogs in which the peroneal nerve was severed yielded the following results. In healthy frogs, in the central stump of the sectioned nerve, axoplasm movement is increased bu the functional state of the fiber is unchanged on the first day. During subsequent days, axoplasm movement decreases; at the same time, rate of conduction is reduced while the refractory period is lengthened. Removal of the adrenal cortex and pancreas magnifies these changes, while administration of adrenalin or acetylcholine causes no improvement. Administration of botulinus toxin in the later stage of nerve fiber regeneration decreases axoplasm flow even more but exerts no effect on the other two parameters. If the animals are infected with botulinus toxin first and the nerve is sectioned after the toxin has arrested axoplasm movement, this

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

Acc. Nr. AP0050714 Abstracting Service: CHEMICAL ABST. 5/70 Ref. Code 4/R 0368

L

105787b Aging of interference light filters. Lazareva, L. D.; Validov, M. A. (USSR). *Zh. Prikl. Spektrosk.* 1970, 12(1), 72-5 (Russ). Vacuum deposited interference light filters with max. transmission in the 8000-Å range were studied in an attempt to improve their natural aging characteristics. Amelioration of these characteristics was obtained by methods involving hermetic sealing and application of surface films such as SiO, CeF_3, and MgF_2. Transmission properties of filter are indicated relative to changes in the position of max. transmission bands for filters subjected to such treatments. J. Beller

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REEL/FRAME
19810712

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APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

USSR UDC 537.312.62:621.318.3

LAZAREV, B. G., LAZAREVA, L. S., GOLIK, V. R., GORIDOV, S. I.,
Physicotechnical Institute, Ukrainian Academy of Sciences

"Experiences in the Development and Application of Laboratory Superconductive Solenoids With Fields of up to 119 kOe"

Moscow, Izvestiya Akademii Nauk SSSR -- Seriya Fizicheskaya, No 11, 1972, pp 2475-2478

Abstract: An account is given of the work in the laboratory of the Physics Institute, USSR Academy of Sciences, on superconductive water-cooled solenoids capable of generating magnetic fields of as much as 175 kOe in the limit, and in the range of 100-120 kOe for average operation. There are many such laboratory solenoids operating throughout the country. Some of the results of the production work on these solenoids and of the experiences of the personnel involved are presented. It is noted that conductors of 25% Nb, 25% Zr, and Ti have been replaced by 60% Nb and Ti alloy, the critical magnetic field for which is 118 and 145 kOe at 4.2 and 2° K respectively and is 165 kOe when the temperature is extrapolated to 0° K. Thirty-five such solenoids generating fields of up to 90 kOe are now in use in scientific establishments in Moscow,

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

USSR

LAZAREV, B. G., et al, Izvestiya Akademii Nauk SSSR -- Seriya Fizicheskaya, No 11, 1972, pp 2475-2478

Leningrad, Kiev, Donetsk, Sverdlovsk, Riga, Vil'nyus, Sukhumi, Makhachkala, and Kharkov. Technical data for some of the solenoids in operation is given in two tables. It is noted that this paper was presented before the All-Union Conference on Magnetism, held in 1971.

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APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

UNCLASSIFIED PROCESSING DATE--24JUL70

TITLE--THERMAL STABILITY OF CERIUM AND PRASEODYMIUM VALERATES -U-

AUTHOR--LAZAREVA, L.S., AMBROZHIY, M.N., DVORNIKOVA, L.M.

23
5
28

COUNTRY OF INFO--USSR

SOURCE--ZH. NEORG. KHIM. 1970, 15(2), 354-7

DATE PUBLISHED--------70

SUBJECT AREAS--CHEMISTRY

TOPIC TAGS--THERMAL STABILITY, CERIUM COMPOUND, PRASEODYMIUM COMPOUND, VALERIUM COMPOUND, THERMAL DECOMPOSITION, ACTIVATION ENERGY, ENDOTHERMIC EFFECT

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

STEP NO--UR/0078/70/015/002/0354/0357

PROXY REEL/FRAME--1983/0966

CIRC ACCESSION NO--AP0053889

UNCLASSIFIED

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

Acc. Nr: AP0053889 Abstracting Service: CHEMICAL ABST. 6-70 Ref. Code: UR 0028

117297e Thermal stability of cerium and praseodymium valerates. Lazareva, L. S.; Ambrozhii, M. N.; Dvornikova, L. M. (Saratov. Gos. Univ., Saratov, USSR). Zh. Neorg. Khim. 1970, 15(2), 354-7 (Russ). NH_4 valerate (NH_4L) was added slowly to 10% soln. of Ln (Ln = Ce or Pr) nitrate and the ppt. was washed and recrystd. to give $LnL_3.H_2O$. DTA indicated that the compds. lost H_2O at 80-110°. $CeL_3.H_2O$ decompd. >240°, giving CeO_2 at 420° as the final product. Thermal decompn. of $PrL_3.H_2O$ proceeded by formation of $PrOL_3$, $2PrO_2.3Pr_2O_3.PrOL.5O_3$ and finally by the formation of Pr_6O_{11} at 580°. Thermal decompn. of $PrL_3.H_2O$ in N atm. has an endothermic effect at 420° which was not present in normal atm. Activation energies of decompn. of $LnL_3.H_2O$ and their decompn. products are tabulated. HMJK

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REEL/FRAME 19830966

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

UNCLASSIFIED PROCESSING DATE--13NOV70

1/2 016

TITLE--A 115-KOE, 157-KOE WITH DYSPROSIUM CONCENTRATOR, SUPERCONDUCTING SOLENOID MADE FROM DUCTILE ALLOYS -U-

AUTHOR-(04)-LAZAREV, B.G., LAZAREVA, L.S., GOLIK, V.R., GORIDOV, S.I.

COUNTRY OF INFO--USSR

SOURCE--FIZIKA METALLOV I METALLOVEDENIE, APR, 1970, 29, (4), 874-876

DATE PUBLISHED----APR70

SUBJECT AREAS--ELECTRONICS AND ELECTRICAL ENGR., MATERIALS

TOPIC TAGS--SUPERCONDUCTOR, SOLENOID, BINARY ALLOY, TERNARY ALLOY

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3003/0674

STEP NO--UR/0126/70/029/004/0874/0876

CIRC ACCESSION NO--AP0129839

UNCLASSIFIED

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

2/2 016 UNCLASSIFIED PROCESSING DATE--13NOV70

CIRC ACCESSION NO--AP0129839

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE CREATION OF SUPERCONDUCTING SOLENOIDS FROM DUCTILE BINARY AND TERNARY ALLOYS (NB-TI, NB-ZR-TI, ETC.) IS DESCRIBED. BY CAREFUL ATTENTION TO THE CONDITIONS OF MANUFACTURE AS WELL AS AN OPTIMUM CHOICE OF ALLOY COMPOSITION AND PROCESSING, A SOLENOID WITH A MOX. FIELD OF 115 KOE IN A SPACE OF 12 MM IN DIA. WAS ACHIEVED. BY INCORPORATING A SIMPLE DY FIELD CONCENTRATOR IN THE FORM OF A PAIR OF CYLINDERS WITH A 1-MM GAP BETWEEN THEIR ENDS, THE FIELD WAS INCREASED TO 157 KOE.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

1/2 039 UNCLASSIFIED PROCESSING DATE--30OCT70

TITLE--INDUCED ANISOTROPY OF CHEMICALLY PRECIPITATED IRON NICKEL PHOSPHORUS FILMS -U-

AUTHOR-(04)-YERSHOV, R.YE., RYABININ, V.P., BATENKOVA, A.YA., LAZAREVA, L.V.

COUNTRY OF INFO--USSR

SOURCE--IZV. VYSSH. UCHEB. ZAVED., FIZ. 1970, 13(3), 136-8

DATE PUBLISHED--------70

SUBJECT AREAS--PHYSICS, MATERIALS

TOPIC TAGS--ANISOTROPY, IRON ALLOY, NICKEL ALLOY, PHOSPHORUS ALLOY, METAL FILM, SURFACE FILM, MAGNETIC FIELD

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1998/1030 STEP NO--UR/0139/70/013/003/0136/0138

CIRC ACCESSION NO--AT0121626

UNCLASSIFIED

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

2/2 039 UNCLASSIFIED PROCESSING DATE--30OCT70

CIRC ACCESSION NO--AT0121626

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. INDUCED ANISOTROPY IN FILMS OF FE 14 PLUS NI 74 PLUS P 12PERCENT, 1 MU THICK, OBTAINED BY CHEM. PPTN. ON BRASS DISKS, 12 MM IN DIAM., WAS STUDIED IN MAGNETIC FIELDS OF 50-500 OE PARALLEL TO THE SURFACE. THE COERCIVE FORCE, H SUBC, INDUCED BY H IN FILMS ON ELECTROPOLISHED BRASS, AS A FUNCTION OF THE ANGLE, ALPHA, BETWEEN THE DIRECTION OF H DURING PPTN. AND THE DIRECTION DURING MAGNETIZATION, PASSED THROUGH A MAX. AT ALPHA EQUALS 90DEGREES. BUT IN FILMS PPTD. ON DISKS POLISHED SO THE SCRATCHES WERE PARALLEL TO EACH OTHER, THE H SUBC PASSED THROUGH A MIN. AT 90DEGREES: I.E., DIRECTED POLISHING OF THE SUBSTRATE INDUCED A HIGHER ANISOTROPY THAN A MAGNETIC FIELD. FACILITY: INST. FIZ., KRASNOYARSK, USSR.

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APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

1/2 013 UNCLASSIFIED PROCESSING DATE--16OCT70

TITLE--ASYMMETRY IN THE ANGULAR DISTRIBUTION OF "DIRECT" PHOTONEUTRONS FROM BISMUTH -U-

AUTHOR-(02)-LAZAREVA, L.E., LEPESTKIN, A.I.

COUNTRY OF INFO--USSR

[illegible] FIZ. 1970, 11(2), 266-72

DATE PUBLISHED-------70

SUBJECT AREAS--PHYSICS

TOPIC TAGS--PHOTONEUTRON, ANGULAR DISTRIBUTION, BISMUTH, BREMSSTRAHLUNG, GAMMA QUANTUM

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1980/0365 STEP NO--UR/0367/70/011/002/0266/0272

CIRC ACCESSION NO--AP0048637

UNCLASSIFIED

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

2/2 013 UNCLASSIFIED PROCESSING DATE--16OCT70

CIRC ACCESSION NO--AP0048637

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. PHOTO N FROM BI, WHEN EMITTED BY THE GAMMA RAY BREMMSSTRAHLUNG SPECTRUM (E GAMMA SUBMAX. EQUALS 28.5 MEV), WERE MEASURED BY USING THE PHOTOEMULSION METHOD AT 30, 45, 60, 75, 90, 105, 120, 135, AND 150DEGREES. THE N SPECTRA AT 90DEGREES TO THE GAMMA BEAM SHOW A SHARP INCREASE IN ASYMMETRY WHEN E GAMMA SUBMAX. IS VARIED 20-8.5 MEV OWING TO THE ABSORPTION OF GAMMA QUANTA WITH ENERGIES 18-27 MEV. A COMPARISON OF N SPECTRA AT E GAMMA SUBMAX. EQUALS 28.5 MEV FOR 30-150 AND 45-135DEGREES SHOWS THAT THE OBSERVED ASYMMETRY RESULTS FROM THE DIFFERENCE IN YIELD OF N WITH ENERGIES 6-7 TO 12-13 MEV, WHICH INDICATES THAT SIMMILAR TO ONE THIRD OF THE ENERGY MUST REMAIN AFTER EMMISSION OF N FROM THE NUCLEUS. FACILITY: SARATOV. GOS. UNIV., SARATOV, USSR.

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APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

USSR

UDC 541.91:547.1'118

LAZAREVA, M. V., PEREKALIN, V. V., and MASTRYUKOVA, T. A., Institute of Metal Organic Compounds, Academy of Sciences, USSR, and Leningrad State Pedagogical Institute Imeni A. I. Gertsen

"Synthesis of 2-Aminoethylphosphonic Acid Homologs"

Moscow, Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya, No 6, Jun 73, pp 1382-1385

Abstract: Homologs of 2-aminoethylphosphonic acid were synthesized by addition of dialkyl phosphites to nitroolefines, followed by the reduction of 2-nitroethylphosphonic acid esters formed to aminoesters. Hydrolysis of the latter gave free acids.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

UDC 542.91:547.1'118

USSR

MASTRYUKOVA, T. A., LAZAREVA, M. V., and PEREKALIN, V. V., Institute of Heteroorganic Compounds, Academy of Sciences USSR, and Leningrad State Pedagogical Institute imeni A. I. Gertsen

"Synthesis of Nitro- and Aminoalkylphosphonates"

Moscow, Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya, No 5, May 72, pp 1164-1168

Abstract: There are two promising methods for the synthesis of organonitrophosphorus compounds, viz. the addition of nitroalkanes to organophosphorus compounds with multiple bonds or the addition of organophosphorus compounds to nitroolefins. The authors used the second method, introducing nitroisoamylene, nitropropylene and ω-nitrostyrene into reaction with dialkyl phosphites and thiophosphites to obtain O,O-dialkyl 1-phenyl-2-nitroethylphosphonates. Catalytic reduction of the resultant nitroalkylphosphonates with hydrogen over Raney nickel gave the corresponding aminoalkylphosphonates. Free 1-alkyl-2-aminoalkylphosphonic acids are obtained by hydrolysis of the esters with hydrochloric acid.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

AN0040828 UR9030

AUTHOR-- LAZAREVA, N.

TITLE-- ASSAULT ON HIGH TEMPERATURE

NEWSPAPER-- NEDELYA, MARCH 30-APRIL 5, 1970, NO. 14, PP 12-13

ABSTRACT-- THE ARTICLE DESCRIBES THE INSTITUTE OF HIGH TEMPERATURES OF THE ACADEMY OF SCIENCES, U.S.S.R., AS A MULTILABORATORY INSTITUTE WHICH CONDUCTS RESEARCH INTO MAGNETOGASDYNAMICS /MGD/ PRINCIPLE OF GENERATING POWER. PRESENTLY THE INSTITUTE IS ABOUT TO COMPLETE THE CONSTRUCTION OF THE SECOND 25,000-KW MGD GENERATOR. ITS FIRST MGD GENERATOR, U-02 COULD GENERATE ONLY 40-KW.

ACCORDING TO CORRESPONDING MEMBER OF THE ACADEMY OF SCIENCES AND DIRECTOR OF THE INSTITUTE, A. YE. SHEYNDLIN, THE ENTIRE RESEARCH PROGRAM OF THE INSTITUTE IS DIRECTED BY ACADEMICIAN V. A. KIRILLIN. THE MOST IMPORTANT PROJECTS /PROBLEMY/ ARE UNDER THE SUPERVISION OF ACADEMICIANS M. A. STYRIKOVICH, L. A. MELENT'YEV, AND S. A. KHRISTIANOVICH.

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AN0040828

THE INSTITUTE,S RESEARCH PROGRAM ENCOMPASSES FOUR PRINCIPAL AREAS--

/1/ HIGH TEMPERATURE PROPERTIES OF MATERIALS /SUCH AS SODIUM AND POTASSIUM/ AND PLASMA

/2/ HIGH ENERGY FLUXES /POWER PLANTS/

/3/ DEVELOPMENT AND STUDY OF HEAT-RESISTANT MATERIALS.

/ABSTRACTOR,S NOTE-- DESPITE THE ORIGINAL ARTICLE,S CLAIM OF FOUR AREAS OF RESEARCH ONLY THREE ARE NAMED./

ADVANCES MADE IN THESE AREAS MADE IT POSSIBLE TO LAUNCH THE DIRECT ENERGY CONVERSION RESEARCH PROGRAM. IN THE DEVELOPMENT OF THE MGD PLANT, THE INSTITUTE COLLABORATED WITH SEVERAL OTHER INSTITUTES. THE CONSTRUCTION OF THE PLANT IS HANDLED BY THE MINISTRY OF ENERGETICS AND ELECTRIFICATION, U.S.S.R.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

AN0040828

THE LABORATORY OF PHYSICAL HYDRODYNAMICS IS HEADED BY PROFESSOR T. V. BAZHENOVA, WHO STUDIES SHOCK WAVES AND SUPERSONIC VELOCITIES. THE GASDYNAMIC SHOCK TUNNELS OF THE LABORATORY WERE USED AT ONE TIME IN SPACESHIP RESEARCH. TODAY THESE TUBES, ACCORDING TO BAZHENOVA, ARE USED TO STUDY PHYSICAL-CHEMICAL TRANSFORMATIONS IN GASEOUS STREAMS AT SUPERSONIC VELOCITIES.

AT THE THEORETICAL DEPARTMENT OF THE INSTITUTE, THE AUTHOR OF THE ARTICLE WAS HOSTED BY G. E. NORMAN, SENIOR SCIENCE ASSOCIATE.

SEVEN PHOTOGRAPHS SHOW JOINING HEAT-STRESSED COMPONENTS OF THE MGD /UPPER LEFT/, SHEYNDLIN /LEFT CENTER/, BAZHENOVA /CENTER/, NORMAN /LOWER CENTER/, MAIN BUILDING OF THE NEW MGD PLANT /RIGHT CENTER/, EXPERIMENTAL PLANT U-02 /UPPER RIGHT/, A. S. SAVVATIMSKIY, JUNIOR SCIENCE ASSOCIATE, CONDUCTS PLASMA EXPERIMENTS /LOWER RIGHT/.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

USSR UDC 669.14.018.8:620.192.63

SAVKINA, L. YA., LAZAREVA, N. A., FEL'DGANDLER, E. G., and AGAPOVA, N. P.

"Tendency to Intercrystalline Corrosion of Low-Carbon Steels Containing Chromium and Nickel"

Moscow, Metallovedeniye i Termicheskaya Obrabotka Metallov, No 2, 1973, pp 55-57

Abstract: Effects of contents of carbon, nickel, chromium, molybdenum, tungsten, and niobium at relations Nb/C=5, 7, 17, and 20 on the tendency of low-carbon steel containing chromium and nickel to intercrystalline corrosion was experimentally investigated by the AM(GOST 6032-52) method on specimens water quenched from 1050°C and tempered at 500-800°C for 0.25-1000 hrs. The 000Kh16N20 steel was not inclined to intercrystalline corrosion at carbon content $<$ 0.08% or by niobium presence according to Nb/C $\geq$ 17. Alloying with Mo and W at the rate of about 2% diminishes somewhat the tendency of the steel to intercrystalline corrosion. The latter appears at higher temperatures. The higher the nickel content the lower the allowable carbon content in the steel at which intercrystalline corrosion is absent. Five figures, one table, six bibliographic references.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

USSR UDC: 621.317.7.089.6B

ABROSIMOV, E. A., LAZAREVA, N. A., MALOSHENKO, O. Ya., SMIDT, V. I.

"A Precision High-Frequency Fixed Capacitor"

Dokl. Vses. nauchno-tekhn. konferentsii po radiotekhn. izmeritiyam. T. 1 (Reports of the All-Union Scientific and Technical Conference on Radio Engineering Measurements. Vol. 1), Novosibirsk, 1970, pp 11-16 (from RZh-Radiotekhnika, No 12, Dec 70, Abstract No 12A362)

Translation: It is noted that standard capacitors must be developed for use with special circuits so that standard inductors and resistors can also be made. A high-frequency reference capacitor based on a coaxial design made at the Siberian Scientific Research Institute of Metrology is described. Its electrical parameters are given. One illustration, bibliography of eight titles. N. S.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

Miscellaneous

USSR UDC 669.15-196:669-974

ZAKHAROV, V. A., LAZAREVA, N. K., and CHICHAGOVA, N. P., Gor'kiy Automobile Plant

"Austenite Stability in Alloyed Cast Iron at Low Temperatures"

Moscow, Metallovedeniye i Termicheskaya Obrabotka Metallov, No 12, 1970, pp 49-50

Abstract: Nickel-copper-chromium cast irons have an austenite structure at room temperature. At below-zero temperatures, however, the austenite in these cast irons turns to martensite, which is followed by volumetric changes, an increase in hardness, and a decrease in metal plasticity. This paper discusses the effect of chromium, nickel, manganese, and copper contents on austenite stability. The study involved 20 melts produced in an MIP-2 150-kg induction-type furnace with nickel contents ranging from 10 to 17%, manganese -- from 0.9 to 3.0%. With a decrease in temperature, the amount of transformed austenite in the cast irons increases. As cast, the cast irons of all melts, with the exception of melt 1 with 10% Ni, are structurally stable down to -76°C. Heat treating of the cast irons according to a specified technique increases the temperature of α-γ transformation, i.e., narrows down the stability range

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

USSR

ZAKHAROV, V. A., et al, Metallovedeniye i Termicheskaya Obrabotka Metallov, No 12, 1970, pp 49-50

of austenite. Increasing the nickel and manganese contents moves the beginning of the martensite transformation to a lower temperature range. At 16% Ni and 1.5 Mn, austenite cast irons have a stable structure at -76°C. In order to preclude structural (and dimensional) changes in austenite cast iron parts at temperatures down to -76°C, it is necessary that the cast iron comprise a minimum of 15% Ni, 1.5-2.0% Mn. Intensive cooling to be used in conjunction with heat treating at 700-750°C is proposed.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

USSR UDC 621.316.345:621.387.322.3

ANTIPOV, B.L., IZUMRUDOV, O.A., LAZAREVA, N.P., SAVEL'YEV, G.A.

"Production Of Multicolor Electroluminescent Panels"

Izv. Leningr. elektrotekhn. in-ta (Journal Of The Leningrad Electrical Engineering Institute), 1972, Issue 108, pp 175-179 (from RZh:Elektronika i yeye primeneniye, No 11, Nov 1972, Abstract No 11B356)

Translation: A variation was developed of a photographic method of producing electoluminescent panels. A glass substrate with a transparent electrode of stannic oxide is covered by a thin (10--15 micron) layer which is easily dissolved in organic solents of lacquer (e.g., nitrocellulose). On the surface of the lacquer film a protective stencil is established by the method of photochemical treatment of a photoresist based on polyvinyl alcohol, which cuts off specific sections of the lacquer film. Subsequently, a continuous layer of an electroluminophor with a specified color of luminescence is deposited onto the surface of the substrate. Fixing of the luminophor on the shield photoresist sections is achieved with treatment by the vapors of a lacquer solvent. The unbound luminophor is easily withdrawn from the shielded sections, after which the shield stencil is removed and at the sections of lacquer films which had become exposed the process of fixing a luminophor of another color is repeated.
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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

USSR

ANTIPOV, B.L., et al., Izv. Leningr. elektrotekhn. in-ta, 1972, Issue 108, pp 175-179

Multicolor panels 0.1--0.2 mm wide can be produced by this method. The merit of the method is the almost total absence of losses of luminophor because the luminophor removed from the sections unrestrained at the substrate is not contaminated by the bonding and can be used a second time without additional cleaning. I.V.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

1/2 012 UNCLASSIFIED PROCESSING DATE--30OCT70

TITLE--SELF ADJUSTING GOLD RUBY GLASS -U-

AUTHOR-(03)-KAMINSKAYA, N.L., SHMELEVA, N.A., LAZAREVA, V.P.

COUNTRY OF INFO--USSR

SOURCE--STEKLO KERAM. 1970, 27(3), 16-19

DATE PUBLISHED--------70

SUBJECT AREAS--MATERIALS

TOPIC TAGS--RUBY, GLASS COMPOSITION, GOLD, TIN OXIDE, ANTIMONY COMPOUND, OXIDE GLASS, SELENIUM, SODIUM NITRATE

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--2000/1651 STEP NO--UR/0072/70/027/003/0016/0019

CIRC ACCESSION NO--AP0125273

UNCLASSIFIED

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

2/2 012 UNCLASSIFIED PROCESSING DATE--30OCT70

CIRC ACCESSION NO--AP0125273

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. SELF ADJUSTING RUBY GLASS OF THE CHEM. COMPN. SIO SUB2 57-60, PBO 19, K SUB2 O 15-18, NA SUB2 O 2, B SUB2 O SUB3 2-3, ZNO 1, SNO 0-0.04, SB SUB2 O SUB3 0.01-0.02, AND AU 0.005-0.04PERCENT WAS PREPD. THE SELF ADJUSTING EFFECT WAS ATTAINED BY INTRODUCING 0.3-0.75 G SE AND (OR) 0.05-0.2 KG NANO SUB3 AND (OR) NAF TO 100 KG GLASS BATCH AT THE END OF ITS MELTING. THE SE:NANO SUB3:NAF RATIO HAD AN EFFECT ON THE TINT OF RUBY GLASS. FACILITY: LENINGRAD. ZAVDO KHUDOZHESTV. ATEKLA, LENINGRAD, USSR.

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APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

1/2 011 UNCLASSIFIED PROCESSING DATE--30OCT70

TITLE--KINETICS OF BENZENESULFONAMIDE SOLVOLYSIS IN DILUTE FUMING SULFURIC ACID -U-

AUTHOR-(04)-RYABOVA, R.S., VINNIK, M.I., LAZAREVA, V.T., ERLIKH, R.D.

COUNTRY OF INFO--USSR

SOURCE--ZH. ORG. KHIM. 1970, 6(4), 797-800

DATE PUBLISHED--------70

SUBJECT AREAS--CHEMISTRY

TOPIC TAGS--CHEMICAL REACTION KINETICS, AMIDE, SULFURIC ACID, BENZENE DERIVATIVE, ORGANIC SULFUR COMPOUND, CHEMICAL REACTION MECHANISM

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--2000/2153 STEP NO--UR/0366/70/006/004/0797/0800

CIRC ACCESSION NO--AP0125736

UNCLASSIFIED

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

UNCLASSIFIED PROCESSING DATE--30OCT70

2/2 011

CIRC ACCESSION NO--AP0125736

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE SOLVOLYSIS OF PHSO SUB2 NH SUB2 IN OLEUM CONTG. 0.01-1.63PERCENT SO SUB3 GIVES PHSO SUB3 H AND H SUB2 NSO SUB3 H AND IT IS A 1ST ORDER REACTION IN RESPECT TO PHSO SUB2 NH SUB2. THE EFFECTIVE RATE CONSTS. INCREASE WITH SO SUB3 CONCN. IN THE LINEAR FASHION. A REACTION MECHANISM IS PROPOSED INVOLVING THE FORMATION OF A COMPLEX BETWEEN PHSO SUB2 NH SUB2 AND H SUB2 S SUB2 O SUB7 (WHICH EXISTS IN OLEUM) AND ITS DECOMPN. TO PHSO SUB3 H AND H SUB2 NS SUB2 O SUB6 H WHICH REACTS WITH H SUB2 SO SUB4 GIVING H SUB2 NSO SUB3 H AND H SUB2 S SUB2 O SUB7.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

1/2 017 UNCLASSIFIED PROCESSING DATE--27NOV70

TITLE--FORMATION OF FREE AMINO ACIDS BY SOME SPOROGENOUS BACTERIA ISOLATED FROM TYPICAL IRRIGATED SIEROZEM -U-

AUTHOR--LAZAREVA, V.V.

COUNTRY OF INFO--USSR

SOURCE--UZB. BIOL. ZH. 1970, 13(6), 61-2

DATE PUBLISHED--------70

SUBJECT AREAS--AGRICULTURE, BIOLOGICAL AND MEDICAL SCIENCES

TOPIC TAGS--BACTERIA, BACILLUS SUBTILIS, SOIL MICROBIOLOGY, CONTINUOUS CULTURE, CULTURE MEDIUM, AMINO ACID

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3008/0014 STEP NO--UR/9079/70/013/006/0061/0062

CIRC ACCESSION NO--AP0137213

UNCLASSIFIED

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

2/2 017 UNCLASSIFIED PROCESSING DATE--27NOV70

CIRC ACCESSION NO--AP0137213

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. APPROX. 677 STRAINS OF BACILLUS MYCOIDES, B. SUBTILIS VAR. VISVOSUS, B. CEREUS, AND B. NATANS ISOLATED FROM IRRIGATED SIOROZEM, WERE TESTED. IN 84 STRAINS, AMINO ACIDS ACCUMULATED IN THE CULTURE MEDIUM, WITH A MAX. AFTER 48-72 HR OF CULTIVATION. GLUTAMIC ACID, VALINE, ALANINE, ASPARTIC ACID, THREONINE, LEUCINE, PHENYLALANINE, AND TYROSINE WERE DETECTED.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

USSR UDC 543.544.2:546.791:551.464

RYABININ, A. I., ROMANOV, A. S., DOROSHENKO, G. A., and LAZAREVA, Ye. A.

"Sorption Method for Isolating Uranium and Other Valuable Metals From Sea Water"

Leningrad, Radiokhimiya, Vol 15, No 6, 1973, pp 884-885

Abstract: Experimental results are reported on extraction of uranium and other elements out of sea water using a specially prepared exchange resin. The resin was obtained by saturating granules of AN-2F anion exchange resin with highly dispersed titanium hydroxide. Sea water was passed through a column packed with this material; 46% of the uranium present in sea water was extracted in one passage. This material separated also Cu, Co, Zn, Ag, In, Tl, Cd, and Hg. Traces of Ni, V, Mo, Pb and Mn were identified spectrophotometrically.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

USSR UDC 543.21'544.6

RYABININ, A. I., and LAZAREVA, Ye. A., Marine Hydrophysical Institute, Academy of Sciences Ukr. SSR, Sevastopol'

"Dynamic Adsorption of Uranium (VI) by a Mixture of Ferric Hydroxide and Cation Exchanger"

Moscow, Zhurnal Analiticheskoy Khimii, Vol 25, No 12, Dec 70, pp 2,377-2,381

Abstract: Adsorption of U(VI) in mg amounts on a mixture of cation exchanger KU-2 in the K form (PK) and $Fe(OH)_3$ was studied. The mixture with the composition $(PK)_3 \cdot Fe(OH)_3$ was prepared by the action of KOH on KU-2 in the Fe(III) form. At U(VI) concentrations of $0.89-3.66 \times 10^{-4}$ M in $UO_2Cl_2-K_2CO_3-H_2O$ and $UO_2Cl_2-K_2CO_3-(0.5M)KCl-H_2O$ solutions, U(VI) was adsorbed completely from these solutions in glass columns with a diameter of 4 mm charged with a mixture containing 169.5 mg $Fe(OH)_3$ and 1 g cation exchanger at an adsorbent grain size of 0.5 ± 0.25 mm. Complete adsorption took place at a pH ~6.0 measured at the exit of the column. With increasing values of pH, the adsorption decreased. Saturation of the adsorbent with U took place after passage of 0.5 mg U_3O_8 through the column. The adsorption was of the cation-exchange type; U could be desorbed with KCl and K_2CO_3 solutions. The procedure described can be

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

USSR

RYABININ, A. I., and LAZAREVA, Ye. A., Zhurnal Analiticheskoy Khimii, Vol 25, No 12, Dec 70, pp 2,377-2,381

applied for the concentration of small amounts of U(VI) to be determined analytically.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

1/2 020 UNCLASSIFIED PROCESSING DATE--30OCT70

TITLE--LONG ACTING STREPTOMYCIN -U-

AUTHOR-(04)-GOLUBEV, V.N., KOROLEVA, V.G., VASILYEV, V.K., LAZAREVA, YE.N.

COUNTRY OF INFO--USSR

SOURCE--ANTIBIOTIKI, 1970, VOL 15, NR 6, PP 491-494

DATE PUBLISHED--------70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES

TOPIC TAGS--BENZENE DERIVATIVE, ETHYLENEDIAMINE, STREPTOMYCIN, SULFATE, BLOOD CHEMISTRY

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--2000/1833 STEP NO--UR/0297/70/015/006/0491/0494

CIRC ACCESSION NO--AP0125444

UNCLASSIFIED

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

2/2 020 UNCLASSIFIED PROCESSING DATE--30OCT70

CIRC ACCESSION NO--AP0125444

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

1,3,DIBENZYL,2,STREPTOMYCINIMIDAZOLIDIN SULFATE, A CONDENSATION PRODUCT OF STREPTOMYCIN WITH N, N PRIME1,DIBENZYLETHYLENDIAMINE WAS STUDIED IN VITRO AND IN VIVO. ON INTRAMUSCULAR ADMINISTRATION OF A WATER SUSPENSION OF STREPTOIMIDOZOLIDIN (PARTICLES OF NOT MORE THAN 30 MICRONS) TO DOGS IN DOSES OF 20000 OR 40000 MU G-KG, THE DRUG WAS ABSORBED TO BLOOD AT A LOWER RATE AND PROVIDED LOWER LEVELS DURING THE FIRST HOURST OF OBSERVATION AS COMPARED TO STREPTOMYCIN, WHILE THE BLOOD LEVELS IN 3, 5, 8, 12 HOURS WERE MUCH HIGHER. MINOR CONCENTRATION OF STREPTOIMIDAZOLIDIN WERE DETECTED UP TO 72 HOURS AFTER THE ADMINISTRAITON. THE NEW DERIVATIVE DID NOT SIGNIFICANTLY DIFFER FROM STREPTOMYCIN BY THE GENERAL ANTIBACTERIAL SPECTRUM IN VITRO AND THE BASIC PHARACOLOGICAL CHARACTERISTICS. FACILITY: NATIONAL INSTITUTE FOR ANTIBIOTICS, MOSCOW.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

2/2 020 UNCLASSIFIED PROCESSING DATE--13NOV70

CIRC ACCESSION NO--AA0123801

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE TITLE COMPD. (I), USEFUL AGAINST INFECTIONS, ESP. EYE INFECTIONS, WAS PREPD. FROM (II), HCHO, AND PHCH SUB2 NHCH SUB2 CH SUB2 NHCH SUB2 PH (III), IN ISO-BUOH OR TERT-BUOH AT 74-80DEGREES. THUS, II 65.18, III 13.52, AND 40PERCENT HCHO 8.4 G GAVE 45.85 G I. I IS LESS ACTIVE THAN II. FACILITY: ALL UNION SCIENTIFIC RESEARCH INSTITUTE OF ANTIBIOTICS.

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APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

Acc. Nr: AP0036327

Ref. Code: UR 0016

PRIMARY SOURCE: Zhurnal Mikrobiologii, Epidemiologii, i Immunobiologii, 1970, Nr 1, pp 115-116

A STUDY OF THE DURATION OF DIPHTHERIA CARRIER STATE AND OF ITS DISTRIBUTION ACCORDING TO AGE

Lazareva, Z. A.; Bibergan, Ye. I.; Kruglyachenko, A. I.

A total of 6,555 persons were examined for carrier state; of this number 132 proved to be carriers. The carriers comprised: 56.7% of children aged from 4 to 6 years, and 12.7% of adults. In 63.9% of the cases the carrier state was transitory, in 3% — of moderate duration, and in 23.5% — prolonged and relapsing. Schick test proved to be negative in all the carriers; it was positive in 3 (1%) of 298 family contacts of the carriers.

The majority of the carriers were suffering from chronic diseases of the nasopharynx, and 4 children — from toxemia of tuberculosis origin.

The use for examination, along with Loeffler's medium, of semifluid enrichment medium offered a possibility of revealing additionally 56 carriers, this constituting 42.3% of the total number of the carriers revealed.

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APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

UDC 616.981.136-039:616.5-076

USSR

POMANSKAYA, L. A., and LAZAREVA, Z. S., Tul'skaya Oblast Sanitary Epidemiological Station, and Hospital No 1 imeni Semashko

"Isolation of Listeria Cultures from a Patient with Cutaneous Manifestations of Listeriosis by the Method of Bioassay on Suckling Mice"

Moscow, Zhurnal Mikrobiologii, Epidemiologii i Immunobiologii, No 5, 1970, pp 40-42

Abstract: Listeria cultures were isolated from the pharynx of a patient with skin involvement by means of bioassay on suckling mice. The patient had been suffering from frequent tonsillitis, and had a history of two spontaneous abortions before the last normal birth. The onset of listeriosis was acute, with a rise in temperature [illegible]. On the fourth day an erythematous rash with pruritus appeared all over [illegible]. She was hospitalized in serious condition with a diagnosis of lacunar angina and erythema nodosum. Pure listeria cultures were isolated only by inoculation of suckling mice with material from her pharynx, first cultured on broth. Repeated bacteriological examinations of the smears from the pharynx, nose, and blood gave negative results, which was due to the action of the antibiotics (penicillin and streptomycin) with which the patient was treated.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

1/2 017 UNCLASSIFIED PROCESSING DATE--16OCT70

TITLE--ISOLATION OF LISTERIA CULTURE FROM A PATIENT WITH CUTANEOUS MANIFESTATIONS OF LISTERIOSIS BY THE METHOD OF BIOLOGICAL TEST ON

AUTHOR-(02)-POMANSKAYA, L.A., LAZAREVA, Z.S.

COUNTRY OF INFO--USSR

SOURCE--ZHURNAL MIKROBIOLOGII, EPIDEMIOLOGII I IMMUNOBIOLOGII, 1970, NR 5, PP 40-42

DATE PUBLISHED--------70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES

TOPIC TAGS--LISTERIOSIS, MOUSE, CULTURE METHOD, PENICILLIN, STREPTOMYCIN

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1994/0101 STEP NO--UR/0016/70/000/005/0040/0042

CIRC ACCESSION NO--AP0114497

UNCLASSIFIED

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

UNCLASSIFIED PROCESSING DATE--16OCT70

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CIRC ACCESSION NO--AP0114497

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. LISTERIA CULTURE WAS ISOLATED FROM THE PHARYNX OF A PATIENT WITH AFFECTION OF THE SKIN, BY MEANS OF A BIOLOGICAL TEST ON SUCKLING MICE. THE PATIENT WAS SUFFERING FROM FREQUENT TONSILLITIS, AND HAD AN AGGREVATED OBSTETRICAL ANAMNESIS. THE ONSET OF THE PRESENT DISEASE WAS ACUTE WITH AN INCREASE OF TEMPERATURE TO 40DEGREESC. RASH OF ERYTHEMATOUS CHARACTER APPEARED ON THE FOURTH DAY ALL OVER THE BODY, WITH PRURITIS. SHE WAS HOSPITALIZED IN A SERIOUS CONDITION WITH A DIAGNOSIS OF LACUNAR ANGINA AND ERYTHEMA NODOSUM. PURE CULTURE OF LISTERIA WAS ISOLATED ONLY BY INOCULATION OF INFANT MICE WITH MATERIAL OBTAINED FROM THE PHARYNX AND FIRST GROWN ON BROTH. REPEATED BACTERIOLOGICAL EXAMINATION OF THE SMEARS FROM THE PHARYNX, NOSE AND BLOOD GAVE NEGATIVE RESULTS. THIS SHOULD BE ATTRIBUTED TO THE ACTION OF ANTIBIOTICS (PENICILLIN AND STREPTOMYCIN) WITH WHICH THE PATIENT WAS TREATED. FACILITY: TUL'SKAYA OBLASTNAYA SANITARNO-EPIDEMIOLOGICHESKAYA STANTSIYA AND BOL'NITSA NO 1 IM. SEMASHKO.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

USSR

UDC 612.861.014.2-06:612.273.2

KHANAMIROV, A. R., Professor, and LAZAREVICH, Ye. A., Rostov Clinic of Ear, Throat, and Nose Diseases

"Changes in the Nasal Mucosa in Albino Rats Due to Acute Hypoxia"

Moscow, Vestnik Otorinolaringologii, No 1, Jan/Feb 72, pp 81-83

Abstract: Rats were exposed to acute hypoxia (an altitude of 10,000 m) for 1 hr in a barochamber, with "ascent" and "descent" performed at the rate of 25-30 mm Hg/min. Pathological changes in the nasal mucosa developed within 2 days, and complete recovery took 3 weeks. Edema of all layers, erythema, focal hemorrhages, and infiltration with leukocytes lasted 14 days and disappeared by the 21st day. Markedly increased secretion by mucous glands lasted 2 days and was followed by dystrophic changes for 14 days and recovery by the 21st day. Structural changes occurred in nerve fibers: vascular nerves recovered in 5 days, glandular nerves in 14 days. Acid and neutral polysaccharides and RNA were redistributed in vascular and glandular cells. Activation of protective processes was marked by accumulation of RNA-rich plasma cells and histiocytes in the connective tissue of the mucous membrane. With preliminary administration of hydrocortisone for 2 days prior to the experiment, the posthypoxic vascular reactions were much less pronounced, and recovery was complete in 2 weeks.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

1/2 026 UNCLASSIFIED PROCESSING DATE--20NOV70

TITLE--BALLASTS FOR SWITCHING HIGH OUTPUT FLUORESCENT LAMPS INTO THREE PHASE 380-220 V MAINS -U-

AUTHOR--LAZAREVITCH, S.B.

COUNTRY OF INFO--USSR

SOURCE--SVETOTEKHNIKA (USSR), NO. 1, P. 12-14 (JAN. 1970)

DATE PUBLISHED----JAN70

SUBJECT AREAS--MECH., IND., CIVIL AND MARINE ENGR, ELECTRONICS AND ELECTRICAL ENGR.

TOPIC TAGS--FLUORESCENT LAMP, ELECTRONIC CIRCUIT, ECONOMICS, ELECTRIC ENERGY CONVERSION

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3004/0126 STEP NO--UR/0311/70/000/001/0012/0014

CIRC ACCESSION NO--AP0130268

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

2/2 026 UNCLASSIFIED PROCESSING DATE--20NOV70

CIRC ACCESSION NO--AP0130488

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. FLUCTUATIONS OF CURRENT AND POWER OF LARGE LAMPS CAUSED BY THE PERMISSIBLE 10PERCENT FLUCTUATION OF THE MAIN VOLTAGE ARE CONSIDERABLY REDUCED BY OPERATING AN ARRANGEMENT OF TWO SERIES LAMPS FROM A STAR CONNECTED THREE PHASE, INSTEAD OF A SINGLE, SUPPLY. THE PAPER DISCUSSES THE THREE PHASE OPERATION OF THE LAMPS AND DESCRIBES THE CIRCUIT DIAGRAMS, ELECTRICAL, ECONOMIC AND DESIGN DATA OF BALLASTS FOR 125, 150 AND 250W LAMPS WHICH PROVED INEXPENSIVE, HAVE LOW POWER LOSS AND PROVIDE SUFFICIENTLY STABLE OPERATION.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

1/2 022 UNCLASSIFIED PROCESSING DATE--30OCT70

TITLE--TEMPERATURE EFFECT ON THE DEFORMATION PROPERTIES OF HIGH TENACITY POLYACRYLONITRILE FIBERS -U-

AUTHOR-(04)-STALEVICH, A.M., LAZARIDI, K.KH., TIRANOV, V.G., VOLF, L.A.

COUNTRY OF INFO--USSR

SOURCE--LEGKA PROM. 1970, (1), 22-4

DATE PUBLISHED--------70

SUBJECT AREAS--MATERIALS

TOPIC TAGS--VISCOELASTICITY, POLYACRYLONITRILE FIBER, TEMPERATURE DEPENDENCE, STATIC LOAD TEST

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--2000/0879 STEP NO--UR/0518/70/000/001/0022/0024

CIRC ACCESSION NO--AP0124542

UNCLASSIFIED

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

2/2 · 022 UNCLASSIFIED PROCESSING DATE--30OCT70

CIRC ACCESSION NO--AP0124542

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE VISCOELASTIC PROPERTIES OF POLYACRYLONITRILE (I) YARN (29.4 TEX) WERE EXAMD. AT STATIC LOADINGS AND AT NEGATIVE40 TO POSITIVE100DEGREES. THE TEMP. DEPENDENCE OF I FIBERS AT VARIOUS LOADINGS AT 100, 70, AND 40DEGREES; THE DEPENDENCE OF THE DEFORMATION AND OF THE DEFORMATION INTENSITY COEFF. ON THE TENSION AT NEGATIVE40, NEGATIVE20, 0, 20, 40, 70, AND 100DEGREES; AND FINALLY THE DEPENDENCE OF THE ELASTICITY ON THE TEMP. WERE DETD. A NEW FORMULA WAS SUGGESTED FOR THE ELASTICITY OF I IN THE GLASSY STATE FOR THE REGION OF LINEAR VISCOELASTICITY. FACILITY: LENINGRAD. INST. TEKST. LEGK. PROM. IM. KIROVA, LENINGRAD, USSR.

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APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

1/2 026 UNCLASSIFIED PROCESSING DATE--23OCT70

TITLE--EXPERIMENTAL DIABETES MELLITUS INDUCED BY 5,(N,ACETAMINOPHENYLAZO),8,OXYQUINOLINE AND ITS PREVENTION -U-

AUTHOR-(02)-LAZARIS, A.YA., BAVELSKIY, Z.YE.

COUNTRY OF INFO--USSR

SOURCE--PATOLOGICHESKAYA FIZIOLOGIYA I EKSPERIMENTAL'NAYA TERAPIYA, 1970, VOL 14, NR 2, PP 44-48

DATE PUBLISHED-------70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES

TOPIC TAGS--DIABETES MELLITUS, AMINE DERIVATIVE, BENZENE DERIVATIVE, QUINOLINE, PANCREAS, LESION, PROPHYLAXIS, ORGANIC SULFUR COMPOUND, CARBAMATE

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1988/0149 STEP NO--UR/0396/70/014/002/0044/0048

CIRC ACCESSION NO--AP0105231

UNCLASSIFIED

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

2/2 026 UNCLASSIFIED PROCESSING DATE--23OCT70

CIRC ACCESSION NO--AP0105231

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. INTRAVENOUS INJECTION OF 15 TO 50 MG-KG OF BODY WEIGHT OF 5,(N, ACETOAMINOPHENYLAZO),8,OXYQUINOLINE PRODUCE SEVERE DIABETES IN RABBITS. THE DISEASE DEVELOPED AS A RESULT OF PROFOUND DESTRUCTIVE LESIONS IN THE ISLANDS OF LANGERHANS OF THE PANCREAS. APPARENTLY THE MECHANISM OF DIABETOGENIC EFFECT OF THE MENTIONED COMPOUND IS BROUGHT TO THE BLOCK OF ZINC IN THE CELLS OF THE ISLANDS WITH THEIR SUBSEQUENT DESTRUCTION AND DEVELOPMENT OF PRIMARY INSULIN DEFICIENCY. DEVELOPMENT OF DIABETES CAN BE COMPLETELY PREVENTED BY PRELIMINARY (30 MINUTES PREVIOUSLY) ADMINISTRATION OF 500 TO 1,000 MG-KG OF DIETHYLDITHIOCARBAMATE OF SODIUM. FACILITY: KAFEDRA PATOLOGICHESKOY FIZIOLOGII KARAGANDINSKOGO MEDITSINSKOGO INSTITUTA.

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APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

Acc. Nr: AP0051920 Ref. Code: UR 0219

PRIMARY SOURCE: Byulleten' Eksperimental'noy Biologii i Meditsiny, 1970, Vol 69, Nr 2, pp 52-55

THE CONTENT OF ZINC IN ENDOCRINE AND EXOCRINE TISSUES OF THE PANCREAS

Ya. A. Lazaris, V. I. Lapin, T. V. Palmina, V. I. Korchin

Karaganda Medical Institute

The authors showed that in the pancreatic endocrine tissue of mammals, whose Langerhans islets are not anatomically separate, quantitative determination of zinc can be carried out without their exsection from the exocrine tissue. It was established that the zinc content in the whole pancreas amounted to 48 μg/g while in the islet tissue it amounted to 356 μg/g, i. e., 7.4 times as much. These findings lend support to the previous reports of Ya. A. Lazaris et al, who demonstrated an important role of the zinc blocking of β-cells of Langerhans islets in pathogenesis of various experimental models of diabetes.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002201720014-2

USSR UDC 591.1.15

MINTS, S. M., PADALKA, YE. S., and LAZAROVICH, V. G.

"Influence of Super-High-Frequency Electromagnetic Field on the Content of Metals and Metal Proteides in Animal Organs and Tissues"

Nuach. dokl. vyssh. shkoly. Biol. n. (Scientific Reports of the Higher School) No 2, 1973, pp 46-49 (from RZh-Biologicheskaya Khimiya, No 12, Jun 73, Abstract No 12 F 1403)

Translation: Experiments on 55 rats revealed that protracted, general exposure to super-high-frequency electromagnetic fields alters the content of iron, copper, cobalt and zinc in animal organs and tissues and also alters the activity of metal proteides of perulic plasmin and the degree of saturation of the transferrin of the blood serum with iron.

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"Effect of a Superhigh-Frequency Electromagnetic Field on the Metal and Metalloprotein Content of Animal Organs and Tissues"

Moscow, Biologicheskiye Nauki, No 2, 1973, pp 46-49

Abstract: Rats were treated daily for 28 days with a superhigh-frequency electromagnetic field to determine changes in the content of metals and metal-containing proteins in various organs and tissues. In the 1st 14 days the iron content of blood serum transferrin decreased but then rose to twice normal by the 28th day. Iron decreased in blood and muscles and increased in bones and liver. Ceruloplasmin activity fluctuated throughout the experiment. Copper content in blood and bone was heightened throughout the experiment. It rose in the liver by the 7th day, and remained high in muscle until the 21st day. Zinc increased in blood and on the 7th and 21st days in bone, while it decreased in the liver and muscles. Cobalt decreased sharply throughout the experiment in blood, liver, and bone, while reduction in muscles occurred only on the 14th day. Thus an electromagnetic field causes considerable shifts in metal distribution. This may be the reason for sensitivity of blood formation

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