"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

1/2 019 UNCLASSIFIED PROCESSING DATE--13NOV70

TITLE--RATNER FORMULA AND SOME NEW RELATIONS -U-

AUTHOR--YEGOROV, YU.V.

COUNTRY OF INFO--USSR

SOURCE--RADIOKHIMIYA 1970, 12(2), 243-53

DATE PUBLISHED--------70

SUBJECT AREAS--PHYSICS, CHEMISTRY

TOPIC TAGS--ISOTHERM, ADSORPTION, CRYSTAL, RADIOACTIVITY

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3005/1419 STEP NO--UR/0186/70/012/002/0243/0253

CIRC ACCESSION NO--AP0133371

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

2/2 019 UNCLASSIFIED PROCESSING DATE--13NOV70

CIRC ACCESSION NO--AP0133371

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. LIMITATIONS OF THE RATNER ISOTHERM OF SECONDARY ADSORPTION OF RADIOACTIVE MICROCOMPONENTS ON POLAR CRYSTALS IS DISCUSSED. A RELATION BETWEEN THE DISTRIBUTION COEFF. OF ADSORPTION AND THE CONCN. OF THE POTENTIAL DETG. IONS IN SOLN. IS RECOMMENDED AS A SUBSTITUTE FOR THE RATNER FORMULA FOR PLOTTING EXPTL. DATA.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

Acc. Nr: AP0044190 Ref. Code: UR 0016

PRIMARY SOURCE: Zhurnal Mikrobiologii, Epidemiologii, i Immunobiologii, 1970, Nr 2, pp 62-67

DIAGNOSTIC SIGNIFICANCE OF INTRADERMAL ALLERGIC TEST IN LISTERIOSIS

Yegorova, A. P., M. Ya. Martynshin, A. N. Malyshev

A lyzate of agar culture of Listeria was used as an allergen. Intradermal test was made in 278 persons; of this number 18 were suffering from bacteriologically confirmed listeriosis, 116 were pregnant women with suspected listeriosis, 97 healthy persons, and 47 patients with diseases of various (not caused by Listeria) etiology. Besides, serological examination (reaction of agglutination and complement fixation) before and after the intradermal test, was carried out. Analogous investigations were performed on experimental animals.

A conclusion was drawn on the possibility of utilization of an allergic test for diagnostic purpose. The required eegree of sensitization occurred only in half of listeriosis patients. It is considered that allergic reactions in the form of hyperemia and edema of the skin not less than 20 mm in diameter, developing in 24 hours and not disappearing by 48 hours may be of diagnostic significance. The absence of reaction in response to the allergen gives no grounds for excluding listeriosis. Weak reactions may be taken into consideration only in the presence of convincing data of serological examination — high antibody titres or their distinct growth.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

UNCLASSIFIED

PROCESSING DATE--23OCT70

1/3 021

TITLE--HYDROXYETHYLATION OF NAPHTHENIC ACID BASED AMINES -U-

AUTHOR-(03)-NAMETKIN, N.S., YEGOROVA, G.M., POTAPOV, G.P.

COUNTRY OF INFO--USSR

SOURCE--NEFTEKHIMIYA 1970, 10(1), 116-19

DATE PUBLISHED--------70

SUBJECT AREAS--CHEMISTRY

TOPIC TAGS--NAPHTHENIC ACID, AMINE, CRUDE OIL, SURFACE ACTIVE AGENT, CATALYSIS, ACTIVATION ENERGY

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1997/0606

STEP NO--UR/0204/70/010/001/0116/0119

CIRC ACCESSION NO--AP0119522

UNCLASSIFIED

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

2/3. 021 UNCLASSIFIED PROCESSING DATE--23OCT70

CIRC ACCESSION NO--AP0119522

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE CYCLOALIPHATIC AMINES DERIVED FROM NAPHTHENIC ACIDS FROM BAKU CRUDE OILS, B SUB1 110-30DEGREES AND 130-160DEGREES WERE ETHOXYLATED AND THE REACTION PRODUCTS STUDIED FOR SURFACE ACTIVE PROPERTIES. THE UNCATALYZED ETHOXYLATION GAVE ONLY N,N,BIS(HYDROXYETHYL)AMINES. THE REACTION CATALYZED BY SOLID KOH (0.5PERCENT) GAVE POLYOXYETHYLENAMINES WITH 2-14 OCH SUB2 CH SUB2 UNITS IN THE CHAIN, WITH AV. MOL. WT. 290-825. THE PRODUCTS HAVE A HIGH CLOUD POINT IN 1PERCENT AQ. SOLN. THE LOWERING OF SURFACE TENSION OF THE AQ. SOLN. IS PROPORTIONAL TO THE CONCN.; THE MAX. EFFECT IS SHOWN BY COMPDS. WITH 6 OCH SUB2 CH SUB2 GROUPS IN THE CHAIN. THE IR SPECTRA HAVE BANDS AT 1130 AND 1260 CM PRIME NEGATIVE1 AND A BROAD BAND AT 3400 CM PRIME NEGATIVE1. THE PRODUCTS ARE USEFUL AS FLOTATION AGENTS FOR LI ORES. KINETIC STUDIES OF ETHOXYLATION WERE MADE ON THE HIGHER BOILING FRACTION AT AN INITIAL ETHYLENE OXIDE CONCN. OF 0.5 MOLE-L. THE RATE CONST. WAS CALCD. FROM THE SLOPE OF LOG DELTA P VS. TIME. FOR UNCATALYZED REACTION AT 140DEGREES, IT IS 3.0 TIMES 10 PRIME4 SEC PRIME NEGATIVE1. AUTOCATALYSIS OF THE REACTION WAS STUDIED BY ADDN. OF (HOCH SUB2 CH SUB2) SUB2-NH TO THE INITIAL REACTION MIXT. THE AUTOCATALYSIS RATE WAS DETD. FROM A SERIES OF RUNS WITH VARIED INITIAL CONCN. OF (HOCH SUB2 CH SUB2) SUB2-NH AND 0.5 MOLE-L. INITIAL ETHYLENE OXIDE CONCN. THE CATALYTIC EFFECT OF (HOCH SUB2 CH SUB2) SUB2 NH IS PROPORTIONAL TO ITS CONCN. THE AUTOCATALYSIS RATE CONST. IS 23.7 TIMES 10 PRIME3 L.-MOLE-SEC.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

3/3. 021 UNCLASSIFIED PROCESSING DATE--23OCT70

CIRC ACCESSION NO--AP0119522

ABSTRACT/EXTRACT--THE ACTIVATION ENERGY OF REACTION WAS DETD. FROM THE RATE CONST. FOR THE UNCATALYZED REACTION AT 150 AND 160DEGREES (4.0 AND 5.0 TIMES 10 PRIME4 SEC PRIME NEGATIVE1, RESP.). THE CALCD. ACTIVATION ENERGY IS SIMILAR TO 11 KCAL-MOLE. FACILITY: INST. NEFTEKHIM. SIN. IM. TOPCHIEVA, MOSCOW, USSR.

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APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

USSR UDC 632.95

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KRUTITSKAYA, M. N., KOL'TSOV, N. S., TRIKHANOV, M. D., SHOGAM, S. M., DAVYDOVA, A. N., YEGOROVA, I. L., and KUZOVLEVA, M. V.

"Method of Preparing Calcium Tet athionate"

USSR Authors' Certificate No 264363, filed 27 Dec 68, published 4 Jun 70 (from RZh-Khimiya, No 1, 10 Jan 71, Abstract No 1N58SP)

Translation: CaS_4O_6 (I) is obtained in an $H_2S_4O_6$ medium by the oxidation of calcium thiosulfate (II) with perhydrol, taken in 10% excess, at 10-12°. 52 g II are added in the course of 1 hr to a 13.5 ml, 27% solution of H_2O_2, cooled to 10°, to which 96 ml $H_2S_4O_6$ (concentration 235 g/l) was added beforehand. The resultant suspension is filtered out from traces of sulfate; the filtrate is evaporated in vacuum, and the residue crystallized. 23 g of 98% dihydrate of I is obtained. The mother liquor remaining after crystallization is used to prepare $H_2S_4O_6$.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

1/2 015 UNCLASSIFIED

TITLE--UTILIZATION OF THE COMPLEX FORMING PROPERTIES OF METALS FOR THE PURIFICATION OF AN ATMOSPHERIC MOISTURE CONDENSATE FROM AMMONIUM IONS

PROCESSING DATE--30OCT70

AUTHOR-(05)-YEGOROVA, I.E., KRASNOSHCHEKOV, V.V., PATRIKEYEVA, T.H., PEPELIAYEV, YU.V., STOLBOV, V.F.

COUNTRY OF INFO--USSR

SOURCE--KOSMICHESKAIA BIOLOGIIA I MEDITSINA, VOL. 4, JAN.-FEB. 1970, P. 56-60

DATE PUBLISHED--------70

SUBJECT AREAS--CHEMISTRY

TOPIC TAGS--MAGNESIUM, ZINC, COPPER, COBALT, NICKEL, AMMONIUM COMPOUND, ION EXCHANGE RESIN

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1997/1559

STEP NO--UR/0453/70/004/000/0056/0060

CIRC ACCESSION NO--AP0120338

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

2/2 015 UNCLASSIFIED PROCESSING DATE--30OCT70

CIRC ACCESSION NO--AP0120338

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. DESCRIPTION OF A PROCEDURE FOR THE ELIMINATION OF AMMONIUM IONS FROM ATMOSPHERIC MOISTURE CONDENSATES BY TREATMENT WITH ME(MG, ZN, CU, CO, NI) EXCHANGE RESINS. THE VOLUME SORPTION CAPACITY OF THESE ION EXCHANGE RESINS IS STUDIED AS A FUNCTION OF THE AMMONIUM CONCENTRATION AND PH. EXPERIMENTS INDICATE THAT AMMONIA, AMINES AND AMINO ACIDS CAN BE EFFECTIVELY REMOVED FROM AQUEOUS SOLUTIONS BY THIS METHOD.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

1/2 016 UNCLASSIFIED PROCESSING DATE--11SEP70

TITLE--USE OF THE COMPLEX FORMING PROPERTIES OF METALS FOR FREEING ATMOSPHERIC CONDENSATE FROM AMMONIUM IONS -U-

AUTHOR--YEGOROVA, L.E., KRASNOSHCHEKOV, V.V., PATRIKEYEVA, T.M., PEPELYAYEV, YU.V., STOLBOV, V.F.

COUNTRY OF INFO--USSR

SOURCE--MOSCOW, KOSMICHESKAYA BIOLOGIYA I MEDITSINA, RUSSIAN, VOL 4, NO 1, JANUARY-FEBRUARY 1970, SUBMITTED FOR PUBLICATION 25 SEPTEMBER 1969, PP

DATE PUBLISHED--------70

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

TOPIC TAGS--AMMONIA, ADSORPTION, CATION EXCHANGE RESIN, METAL COMPLEX COMPOUND, ATMOSPHERIC WATER

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1987/1291 STEP NO--UR/0453/69/004/001/0056/0060

CIRC ACCESSION NO--AP0104629

UNCLASSIFIED

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

2/2 016

UNCLASSIFIED

CIRC ACCESSION NO--AP0104629 PROCESSING DATE--11SEP70

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. A STUDY WAS MADE OF THE SORPTION OF AMMONIUM, WHICH IS ONE OF THE MAIN COMPONENTS OF ATMOSPHERIC CONDENSATE, FROM WATER SOLUTIONS BY MEANS OF CATION EXCHANGE RESINS IN THE ME FORM. THE RELATIONSHIP BETWEEN THE VOLUME CAPACITY OF CATIONITES IN ME FORM, THE AMMONIUM CONCENTRATION IN THE SOLUTION AND THE HYDROGEN ION CONCENTRATION WAS EXAMINED. IT WAS FOUND THAT THE USE OF CATIONITES IN ME FORM (PARTICULARLY IN THE CU FORM) INCREASED THEIR AMMONIUM CAPACITY.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

USSR

UDC 547.269.3+541.49

IL'YASHEVICH, I. I., PODCHAYNOVA, V. N., SEREBRYAKOVA, N. V., YEGOROVA, L. G., and TYURENKOVA, G. N., Ural Polytechnical Institute imeni S. M. Kirov

"Synthesis of Complexing Agents. Ethylenediamine-N,N'-di-β-ethanesulfonic-N-methylphosphonic Acid and Its Properties"

Leningrad, Zhurnal Obshchey Khimii, Vol 41 (103), No 4, Apr 71, pp 758-761

Abstract: Ethylenediamine-N,N'-di-β-ethanesulfonic acid was dissolved in water; its pH was brought to 8-9. Chloromethylphosphonic acid was prepared. Both solutions were then combined, kept on water bath until the pH ceased to change, maintaining it at 8-9 during the reaction time. At the completion of the reaction, the solution was cooled, its pH lowered to 1-2 by addition of HCl, the solution was filtered and evaporated. Next it was passed through a KU-1 ion exchange column, evaporated, and the product -- ethylenediamine-N-N'-di-β-ethanesulfonic-N-methylphosphonic acid (I), m.p. 86-87° is precipitated with methanol. It is more basic than ethylenediamine-N,N'-di-β-ethanesulfonic acid, but less basic than ethylenediamine-N,N'-tri-β-ethanesulfonic acid (II). It was shown that presence of the $P(O)(O^-)_2$ group in (I) increases the stability of its complexes with cations, as compared to (II).

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

USSR

UDC 547.2.9.3+541.49

SEREBRYAKOVA, N. V., YEGOROVA, L. G., and TYURENKOVA, G. N.

"Synthesis of Complexing Compounds. Ethylenediamine-N,N'-di-β-ethanesulfonyl-N-carboxymethyl-N'-methylphosphonic Acid (EDSUP)"

Leningrad, Zhurnal Obshchey Khimii, Vol 41, No 8, Aug 71, pp 1812-1815

Abstract: Continuing their work on the synthesis of complexing agents and the study of their chemical properties, the authors synthesized ethylenediamine-N,N'-di-β-ethanesulfonyl-N-carboxymethyl-N'-methylphosphonic acid (EDSUP) and determined its dissociation constants by the potentiometric method. It is shown that replacement of a carboxymethyl group in the molecule of ethylenediamine-N,N'-di-β-ethanesulfonyl-N,N'-diacetic acid (EDES) by the methylphosphonic group increases the stability of the resultant complex compounds. EDSUP is superior to EDES in complexing efficiency, but forms complexes less stable than those of EDTA. The authors thank I. YA. POSTOVSKIY for his advice and interest in the work.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

1/2 008 UNCLASSIFIED PROCESSING DATE--16OCT70

TITLE--COMPLEXING PROPERTIES OF STEREOISOMERS OF DIMERCAPTOSUCCINIC ACID -U-

AUTHOR-(04)-OKONISHNIKOVA, I.YE., YEGOROVA, L.G., NIRENBURG, V.L., POSTOVSKIY, I.YA.

COUNTRY OF INFO--USSR

SOURCE--KHIM.-FARM. ZH. 1970, 4(1), 21-4

DATE PUBLISHED--------70

SUBJECT AREAS--CHEMISTRY, BIOLOGICAL AND MEDICAL SCIENCES

TOPIC TAGS--ISOMER, RAT, MERCURY COMPOUND

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1993/1901 STEP NO--UR/0450/70/004/001/0021/0024

CIRC ACCESSION NO--AT0114341

UNCLASSIFIED

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

2/2 008 UNCLASSIFIED

CIRC ACCESSION NO--AT0114341 PROCESSING DATE--16OCT70

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. TWO FORMS OF THE TITLE COMPD., DL-DMSA AND MESO-DMSA, WERE TESTED AS TO THEIR RELATIVE EFFICACY IN THE REDN. OF PRIME203 HGCL SUB2 WHICH HAD BEEN GIVEN TO RATS. THE ISOMER TESTED WAS ADMINISTERED IS LESS THAN OR EQUAL TO 15 MIN PRIOR TO THE INTRODUCTION OF THE HG COMPD., 3 DOSES OF THE RESP. ISOMER BEING GIVEN EACH DAY FOR A TOTAL OF 3 DAYS. THE HG WAS GIVEN S. C. AT LEVELS OF 35, 70, AND 242 MG-KG. AN EXPT. WAS ALSO DONE AT AN ORAL DOSAGE LEVEL OF 385 MG-KG. THE PERCENT OF THE HG COMPD. ELIMINATED WAS CHECKED AFTER 1 AND 3 DAYS. IN ALL CASES THE DL FORM WAS MUCH MORE EFFICIENT THAN THE MESO FORM. THE RESULTS ARE GIVEN IN TABULAR FORM. ON ALKALI TITRN. OF THE 2 FORMS, BOTH IN THE PRESENCE AND ABSENCE OF HGCL SUB2, IT WAS FOUND THAT THE 2 TITRN. CURVES WERE ALMOST IDENTICAL. HOWEVER, DIFFERENCES WERE NOTED IN THE CURVES WHEN THE ABSORBANCEWAS DETD. AT DIFFERENT PH LEVELS. FACILITY: SVERDLOVSK. INST. GIG. TR. PROFZABOL, SVERDLOVSK, USSR.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

USSR

UDC 911.3.616.9:597.6(571.18)

KORSH, P. V., RAVDONIKAS, O. V., MAL'KOV, G. B., VORONIN, Yu. K., ZIMINA, V. Ye., KOSTYUKOV, V. P., IVANOV, V. S., FEDOROVA, T. N., YEGOROVA, L. S., RUDAKOV, V. A., CHULOVSKIY, I. K., and SHAYMAN, M. S.

"On Carrier Characteristics and Contacts With Vectors of Viral and Bacterial Infections Among Omskaya Oblast Wild Animals"

V sb. Vopr. infekts. patol. (Problems of Infection Pathology — collection of works) Vyp. 2, Omsk, 1970, pp 75-78 (from RZh-Meditsinskaya Geografiya, No 4, Apr 71, Abstract No 4.36.51)

Translation: A table is presented of species composition of oblast wild animals and their relative population by individual landscape subzones in Omskaya oblast (64 species). Transmission of infections with natural foci was established in 27 species for the following diseases: tickborne encephalitis, Omsk hemorrhagic fever, rabies, tickborne scrub fever, Q fever, tularemia, erysipelas, toxoplasmosis, and leptospirosis.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

USSR

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UDC 632.95

AREN, A. K., FAL'KENSHTEYN, B. Yu., ZELMEN, V. N., YEGOROVA, L. V., OZOLIN', R. R., POPLAVSKAYA, N. I., and SHOFRO, E. A., Institute of Organic Synthesis, Academy of Sciences Latvian SSR

"Method of Preparing 2-(α-phenyl-α-p-fluorophenylacetyl)-1,3-indandione"

USSR Authors' Certificate No 263586, filed 14 Nov 67, published 4 Jun 70 (from RZh-Khimiya, No 1, 10 Jan 71, Abstract No 1N531P)

Translation: A mixture of 4.5 g metallic Na is heated at 130-140° in 50 ml anhydrous PhMe, 45 ml anhydrous MeOH is then added dropwise to the mixture. The mass is heated on an oil bath for 1-1.5 hr with intensive stirring, evaporated, and the residue cooled to 80° and treated with 150 ml anhydrous C_6H_6 and 20 g dimethyl phthalate. A mixture of 11.25 g freshly prepared phenyl-fluorophenylacetone in 50 ml anhydrous C_6H_6 is added dropwise over the space of 1 hr to the reaction mass, with a 50 ml mixture of C_6H_5 and MeOH distilled off at the same time. Then once more a mixture of 11.25 g freshly prepared 2-phenyl-2-p-fluorophenylacetone and 4 g anhydrous dimethyl phthalate in 50 ml anhydrous C_6H_6 is added dropwise, with 50 ml of solvents being distilled off. During condensation oil bath temperature is 118-120°. After components are mixed, the mixture is stirred for 10 hr at 118-120°,

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

USSR

Aren, A. K., et al., USSR Authors' Certificate No 263586, filed 14 Nov 67, published 4 Jun 70 (from RZh-Khimiya, No 1, 10 Jan 71, Abstract No 1N531P)

evaporated at 11-15 mm; the oily residue is treated with 800 ml cold water, and heated with stirring. The layer of water is decanted, and the crystalline residue treated analogously three or four times with water until it dissolves completely. Combined water layers are treated with 40 ml dilute HCl (acid, 1:1) until the reaction of the medium is acid, are stirred, kept for ~12 hr, and decanted. The amorphous residue is treated with 80 ml hot iso-PrOH and stirred. A yellow precipitate is filtered off, which is rinsed two or three times with 10 to 15 ml portions of cold iso-PrOH, to yield 15 g (42.5%) 2-(α-phenyl-α-p-fluorophenylacetyl)-1,3-indandione (I), melting point 121-5°. The isopropyl mother liquors are diluted with 100-150 ml water and decanted; the oily residue is treated with 5 ml HCL (acid, 1:1), to yield, as described above, an additional 3 g (8.5%) I. I possesses a broad spectrum of zoocidal action.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

USSR

UDC 622.011.43

MATVEYEVA, N. N., and YEGOROVA, L. V.

"Concerning a Class of Laws of Change of the Velocity v(x,z)"

Leningrad, Vopr. Dinamich. Teorii Rasprostr. Seysmich. Voln -- Sbornik (questions of the Dynamic Theory of the Propagation of Seismic Waves -- Collection of Works), Naika, No 11, 1971, pp 72-79 (from Referativnyy Zhurnal, Mekhanika, No 2, Feb 72, Abstract No 2V869 by A. A. Gvozdev)

Translation: Attention is directed to the fact that the equation of an eikonal can be solved in quadratures in the case where the wave-propagation rate in Cartesian coordinates x and z is given in the form of $v(x,z) = [f(x) + \varphi(z)]^{-\frac{1}{2}}$. Analogously, in the spherical coordinates, r, theta the solution in quadratures is obtained when

The above-noted circumstance is used for obtaining simple formulas for the waverange times and for the immersion depth of the rays for two particular cases;

$$\varphi(z) = 1/v_0^2(1 + \varepsilon z) \text{ when } f(x) = cx/v_0^2$$

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$$\varphi(r) = R^2(r/R)^{2(k+1)}/v_0^2 \text{ when } f(\theta) = Rc\theta/v_0^2$$

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

1/2 021 UNCLASSIFIED PROCESSING DATE--16OCT70

TITLE--AEROSOL REVACCINATION WITH TYPHOID BOTULINUM A AND B TRIVACCINE AND WITH TYPHOID TETANUS BOTULINUM A AND B TETRAVACCINE UNDER EXPERIMENTAL

AUTHOR-(05)-ALEKANDROV, N.I., GEFEN, N.YE., YEGOROVA, N.B., YEFREMOVA, V.N., VORONTSOV, I.V.

COUNTRY OF INFO--USSR

SOURCE--ZHURNAL MIKROBIOLOGII, EPIDEMIOLOGII I IMMUNOBIOLOGII, 1970, NR 5, PP 84-89

DATE PUBLISHED--------70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES

TOPIC TAGS--AEROSOL VACCINE, TYPHOID FEVER VACCINE, IMMUNIZATION, BOTULISM, TETANUS

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1994/0151 STEP NO--UR/0016/70/000/005/0084/0089

CIRC ACCESSION NO--AP0114547

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

2/2 021 UNCLASSIFIED

CIRC ACCESSION NO--AP0114547 PROCESSING DATE--16OCT70

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. A STUDY WAS MADE OF THE POSSIBILITY OF INDUCTION OF INTENSE IMMUNITY AGAINST BOTULISM, TYPES A AND B, AND TETANUS FOLLOWING SINGLE AEROSOL REVACCINATION WITH ASSOCIATED PREPARATIONS. RABBITS AND GUINEA PIGS WHICH WERE VACCINED TWICE WITH SEXTATOXOID OF THE KHARKOV INSTITUTE OF VACCINE AND SERA 5 TO 6 MONTHS BEFORE WERE SUBJECTED TO REVACCINATION. AEROSOL REVACCINATION WITH TYPHOID BOTULINUM A AND B TRIVACCINE, AND WITH TYPHOID TETANUS BOTULINUM A AND B TETRAVACCINE PRODUCED A CONSIDERABLE ELEVATION OF THE LEVEL OF ANTITOXIN AGAINST ALL THE TOXOIDS INCLUDED INTO THE COMPOSITION OF THE VACCINES. REVACCINATED RABBITS PROVED TO BE RESISTANT TO ADMINISTRATION OF 500 DLM OF BOTULIN, TYPE A, AND OF 100 DIM OF TYPE B. THERE WAS ALSO AN ELEVATION OF THE TITRES OF TYPHOID O HEMAGGLUTININS IN RABBITS. FACILITY: MOSCOW INSTITUT VAKTSIN I SYYOROTOK IM. MECHNIKOVA.

UNCLASSIFIED

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

Immunology

USSR

UDC 615.372:576.851.551].015.4:612.017.1

~~YEGOROVA, N. B.~~, YEFREMOVA, V. N., and FEDYAYEV, S. F., Moscow Institute of Vaccines and Sera imeni Mechnikov

"Immunobiological Parallels in Experimental Investigations of Dry and Liquid Vaccinal Aerosols on Animals. Report II. Sensitizing Action of Tetanus Toxoid Aerosol Depending on Its Fractional Dispersive Composition"

Moscow, Zhurnal Mikrobiologii, Epidemiologii i Immunobiologii, No 11, 1971, pp 82-87

Abstract: The tests were performed on guinea pigs, and the development of anaphylactic shock and lethal outcome served as the criterion of sensitization. In all cases, the antitoxin titers in the animals were 0.01-0.1 MU/ml after the first vaccination and 40-50 MU/ml after the second vaccination. Combined tetanus toxoid and typhoid antigen aerosol containing less than 50% of small particles (up to 2 microns in diameter) induced anaphylactic shock in 33% of the animals after the first immunization and in 49% after the second, while combined aerosol containing 60-70% of the small particles induced anaphylactic shock in 73% and 79% respectively and lethal outcome in 23% of the animals. Vaccination with aerosols containing only tetanus toxoid yielded similar results. It is concluded that the presence of typhoid antigen does not

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USSR

YEGOROVA, N. B., et al., Zhurnal Mikrobiologii, Epidemiologii i Immunobiologii, No 11, 1971, pp 82-87

affect the toxicity of the preparation and that the proportion of small dispersoids should be appropriately reduced in order to make the aerosols less toxic.

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USSR

UDC 621.317.616

ALEKSEYEVA, L. I., YEVSEYEV, V. I., YEGOROVA, N. P., FAYGENBLYUM, H. A.

"A Curve-Tracing Instrument"

Moscow, Otkrytiya, izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, No 2, Jan 71, Author's Certificate No 290467, division H, filed 1 Mar 68, published 22 Dec 70, p 164

Translation: This Author's Certificate introduces a curve-tracing device for finding the frequency response of communications channels by direct comparison on the screen of a cathode ray tube. The device contains a stepped frequency response indicator, a wobbulator, and a module for studying frequency responses. As a distinguishing feature of the patent, in order to automate the process of measuring frequency responses of communications channels and to obtain a stepped reference response, a fixed attenuator is connected between the wobbulator and the channel to be measured, while the comparison circuit contains attenuators connected to the above-mentioned stepped frequency response indicator.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

USSR UDC: 621.396.6-181.5

YEGOROVA, N. M., KANDYBA, P. Ye.

"On the Problem of Selecting Conditions for Depositing Stable Low-Resistance Nichrome Films"

Elektron. tekhnika. Nauch.-tekhn. sb. Priyemno-usilit. lampy (Electronic Technology. Scientific and Technical Collection. Receiving and Amplifying Tubes), 1970, vyp. 2(17), pp 23-28 (from RZh-Radiotekhnika, No 5, May 71, Abstract No 5V215)

Translation: A basis is given for selection of substrate temperature for vapor deposition of low-resistance nichrome films. It is found that for low value resistors, the temperature coefficient of resistance is a nonlinear function of resistance. The highest stability is observed with deposition on substrates heated to temperatures above 300°C. It is shown how the films can be chemically adjusted to increase resistor ratings and improve stability. Resumé.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

USSR UDC 542.91:547.1'118

MUSLINKIN, A. A., NEKLESOVA, I. D., KUDRINA, M. A., YEGOROVA, N. V., IRAIDOVA, I. S., and LOGINOV, V. B., Institute of Organic and Physical Chemistry Imeni A. Ye. Arbuzov, Acad. Sc. USSR

"Synthesis and Some Properties of Acrylic and Methacrylic Derivatives of Chlorophos and Its Analogues"

Moscow, Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya, No 4, Apr 73, pp 883-886

Abstract: Reaction of chlorophos and its analogues with acid chlorides of acrylic, metacrylic and α-fluoroacrylic acids gave new products with fungicidal activity: 0,0-diphenyl-, 0,0-di-n-butyl-, and 0,0-dimethyl-(1-acroyloxy-2,2,2-trichloroethyl)phosphonate, di-n-butyl-(1-metacryloxy-2,2,2-trichloroethyl) phosphonate and 0,0-d-n-butyl-(1- α-fluoroacroyloxy-2,2,2-trichloroethyl) phosphonate. Using 0,0-di-methyl ether of 1-acetoxy-2,2,2-trichloroethylphosphonic acid as control, it has been established that replacement of the acetyl group by an acroyl or metacroyl radical increases the fungicidal activity and toxicity. Introduction of a chlorine atom onto an alkoxy group has a similar effect. Elongation of an alkoxy chain at the phosphorus atom decreases the toxicity.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

USSR UDC 542.91:547.1'118

ARBUZOV, B. A., ZOROASTROVA, V. M., NEKLESOVA, I. D., KUDRINA, M. A., YEGOROVA, N. V., and tudriy, g. a., Chemistry Institute imeni A. M. Butlerov of Kazan' State University imeni V. I. Ul'yanov-Lenin and Institute of Organic and Physical Chemistry imeni A, Ye. Arbuzov of the Academy of Sciences USSR

"Derivatives of Phosphorus Acids and α-Chloroallyl Alcohol. 2. Synthesis of Mixed α-Chloroallyl Esters of Phosphoric Acid and Some of their Biological Properties"

Moscow, Izvestiya Akademii Nauk SSSSR, Seriya Khimicheskaya, No 5, May 72, pp 1155-1159

Abstract: A previous article by the authors described some phosphorous, phosphoric, thiophosphoric and phosphinic acid esters containing an α-chloroallyl radical. A study of biological properties of the synthesized compounds showed that they have a selective fungicidal and antimicrobial effect. Low toxicity and significant activity towards the dermatophytes Trichophyton gypseum and Epidermophyton Kaufmann-Wolf were noticeable in mixed phosphoric acid esters containing one α-chloroallyl radical. Preliminary data showed that the fungicidal activity of the mixed esters increases with lengthening of the hydrocarbon radicals at the phosphorus atom, while toxicity declines.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

ARBUZOV, B. A., et al., Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya, No 5, May 72, pp 1155-1159

The present article gives a more detailed study of the biological effect of this type of compound. The alkyl radical in the series of compounds

$(RO)_2P(O) - OCH_2 - C(Cl) = CH_2$ was lengthened from C_1 to C_6. An improvement in the synthesis, viz. conducting the reaction between dialkylphosphoric acid chlorides and α-chloroallyl alcohol in an absolute benzene (instead of ether, as before) and at room temperature, increased the yields considerably. The results indicate that the selectivity of the action of the compounds on the dermatophytes is sharply increased by lengthening the alkyl radical from C_1 to C_6. Further lengthening of the radical reduces the antifungal activity of the compounds. The top selectivity index is found in di-n-amyl- α -chloroallyl phosphate.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

1/2 027 UNCLASSIFIED PROCESSING DATE--30OCT70

TITLE--THERMOPHYSICAL PROPERTIES OF FILLED EBONITE MIXTURES BASED ON SKMS-50P -U-

AUTHOR-(05)-ZANEMONETS, N.A., YEGOROVA, S.A., NEKRASOVA, E.I., AGAYANTS, I.M., KOCHANOVA, O.M.

COUNTRY OF INFO--USSR

SOURCE--KAUCH. REZINA 1970, 29(2), 27-9

DATE PUBLISHED-------70

SUBJECT AREAS--MATERIALS, PHYSICS

TOPIC TAGS--FILLER, SYNTHETIC RUBBER, HEAT TRANSFER COEFFICIENT, HEAT CAPACITY, EBONITE, STYRENE/(U)SKMS50P SYNTHETIC RUBBER

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1997/0457 STEP NO--UR/0138/70/029/002/0027/0029

CIRC ACCESSION NO--AP0119393

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

UNCLASSIFIED PROCESSING DATE--30OCT70

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CIRC ACCESSION NO--AP0119393

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE HEAT COND. COEFFS. (LAMBDA IN KCAL-M-HR-DEGREESC). HEAT TRANSFER COEFFS. (A IN DEGREES M PRIME2-HR), AND VOL. HEAT CAPACITIES (C EQUALS LAMBDA-A) WERE DETD. FOR EBONITES MADE FROM SYNTHETIC RUBBER SKMS-50P FILLED WITH LESS THAN OR EQUAL TO 300 PARTS OF EBONITE POWDER, KEROGEN, CARBON POWDER, OR KAOLIN IN THE 30-170DEGREES RANGE. THE TEMP. HAD NO EFFECT ON LAMBDA AND A. THE INCREASE OF THE FILLER AMT. INCREASED LAMBDA AND A. TYPICALLY LAMBDA AND A OF THE UNFILLED EBONITE WERE, RESP., 0.181 AND 3.71 TIMES 10 NEGATIVE PRIME4., LAMBDA AND A OF THE EBONITES CONTG. 100 PARTS AND 300 PARTS CARBON POWDER WERE, RESP., 0.203, 4.24 TIMES 10 NEGATIVE PRIME4 AND 0.244, 4.74 TIMES 10 NEGATIVE PRIME4. THESE EBONITES CONFORMED TO THE PHONON THEORY OF HEAT TRANSFER AND THE EQUATION LAMBDA EQUALS CUL-3 (U IS THE AV. PHONON VELOCITY APPROXIMATELY EQUAL TO 2.5 TIMES 10 PRIME5 CM-SEC AND L IS THE AV. FREE PATH OF THE PHONON). FACILITY: MOSK. KHIM. TEKHNOL. INST. IM. LOMONOSOVA, MOSCOW, USSR.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

UDC 621.791.756

USSR

MAKARA, A. M., YEGOROVA, S. V., and NOVIKOV, I. V., Electric Welding Institute imeni Ye. O Paton, Academy of Sciences UkrSSR

"Increasing the Output of Electroslag Welding"

Kiev, Avtomaticheskaya Svarka, No 7, Jul 70, pp 39-42

Abstract: The present study discusses the potentials of increasing the output of the electroslag process and improving the quality of welds by regulating the heat distribution in the welding pool in such a manner that the major portion of the thermal output is liberated in zones of maximum heat transfer in the immediate vicinity of the water-cooled forming devices. The experiments were conducted on steels 16GS (elongation at rupture = 50 mm), 09G2S (elongation at rupture = 90 and 120 mm [GOST 5520-62], and 22K (elongation at rupture = 105 mm [TU GKP 1-55]). The significant change in the shape of the metal pool by heat redistribution is illustrated in a figure. Electroslag welding with two wires in fixed position at the sliders appears to be the optimum welding. The conditions which arise at this point are favorable to the crystallization of the metal pool, which promotes higher resistance to hot cracks. The use of filler wire without current raises the resistance of

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

USSR

MAKARA, A. M., et al, Avtomaticheskaya Svarka, No 7, Jul 70, pp 39-42

welds to hot cracking. Figures in the original article show crystallization layers indicative of changes in the shape to match the thickness of the metal to be welded.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

USSR

UDC 621.791.756.011

MAKARA, A. M., YEGOROVA, S. V., NOVIKOV, I. V., Institute of Electric Welding imeni Ye. O. Paton, and BRONSHTEYN, L. M., Petrov Volgograd Plant

"Increase in Seam Impact Toughness With Electroslag Welding"

Kiev, Avtomaticheskaya Svarka, No 10, Oct 70, pp 43-46

Abstract: This paper describes experiments conducted for improving the shock resistance of the metal ring seams made in the manufacture of oil apparatus vessels made of 16Gs steel (GOST standard 5520-62) the specifications for which are given. The various methods tested were alloying the seam metal within definite limits with elements reducing the cold brittleness of steels, abrupt cooling of the welded metals, and various techniques of electroslag welding involving the use of fluoride flux ANF-6, made up of 60-70% CaF_2 and 30-40% Al_2O_3, to reduce the gas and nonmetallic contents of the seam, using a shallow slag bath, and using electrode wires of 5 mm in diameter applied to the weld zone with roller clamps. A table is given of the various alloys tried by the authors, and there is a second table of the characteristics of alloys involving the use of welding wire Sv-10G2. Photographs of the weld microstructure are also given. The authors promise another article in which the causes of the improvement made in the metal of the weld by their techniques will be [illegible]. 1/1

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

USSR

UDC: 681.3.06:51

DELYUKIN, G. V., YEGOROVA, T. G., POLYAKOV, V. A., and TALALAY, M. M.

"Subprograms for Processing Symbolic Information"

Vestn. Khar'kov politekhn. in-ta (Herald of the Kharkov Polytechnical Institute) No 77, 1973, pp 14-16 (from RZh--Avtomatika, telemekhanika i vychislitel'naya tekhnika, No 12, 1973, Abstract No 12B139)

Translation: The deficiencies of glossary capacity in modern and newly designed electronic computers are considered. It is proposed to increase the computer's glossary capacity by introducing new commands or standard subprograms for element-by-element transformation of symbols. The content of most of the programs is described by the command of a hypothetical computer.

Increasing the glossary capacity of the computer permits realization of element-by-element transformation of symbols, eases the associative search for information, and simplifies the modeling of digital devices of any significance on existing computers of the general type. Resume.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

1/2 009 UNCLASSIFIED PROCESSING DATE--27NOV70

TITLE--COLORIMETRIC DETERMINATION OF PHOSPHORUS PENTOXIDE IN FERTILIZERS USING A PHOSPHOVANADATE MOLYBDATE COMPLEX --U-

AUTHOR--YEGOROVA, T.K.

COUNTRY OF INFO--USSR

SOURCE--AGROKHIMIYA 1970, (4), 131-4

DATE PUBLISHED--------70

SUBJECT AREAS--AGRICULTURE, CHEMISTRY

TOPIC TAGS--PHOSPHORUS FERTILIZER, PHOSPHORUS COMPOUND, CHEMICAL ANALYSIS, COLORIMETRY

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3006/0453 STEP NO--UR/0485/70/000/004/0131/0134

CIRC ACCESSION NO--AP0134221

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

UNCLASSIFIED PROCESSING DATE--27NOV70

2/2 009

CIRC ACCESSION NO--AP0134221

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE PHOTOMETRIC DETN. OF P IN FERTILIZERS HAS THE SAME ACCURACY AS THE GRAVIMETRIC METHOD AND IS MUCH FASTER. THE YELLOW COLOR OF THE VANADATE MOLYBDATE COMPLEX CAN BE USED BECAUSE OF ITS STABILITY FOR A LONGER PERIOD.

FACILITY: VSES. NAUCH.-ISSLED. INST. UDOBR. AGROPOCHVOYED., MOSCOW, USSR.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

UNCLASSIFIED PROCESSING DATE--13NOV70

1/2 024

TITLE--EXPERIMENTAL STUDY OF RADIONUCLIDE TRANSFER THROUGH THE PLACENTA AND THEIR BIOLOGICAL ACTION ON THE FETUS -U-

AUTHOR-(05)-MOSKALEV, YU.I., BULDAKOV, L.A., LYANGINSKAYA, A.M., CVCHARENKO, E.P., YEGOROVA, T.M.

COUNTRY OF INFO--USSR

SOURCE--(CONF 690501, PP 153-60)

DATE PUBLISHED--------70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES, NUCLEAR SCIENCE AND TECHNOLOGY

TOPIC TAGS--PLACENTAL TRANSPORT, RADIOACTIVE ISOTOPE, TRANSURANIUM ELEMENT, FETUS, STRONTIUM ISOTOPE, AMERICIUM ISOTOPE, IODINE ISOTOPE, RADIATION BIOLOGIC EFFECT

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3001/2183 STEP NO--UR/0000/70/000/000/0153/0160

CIRC ACCESSION NO--AT0127547

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

2/2 024 UNCLASSIFIED PROCESSING DATE--13NOV70

CIRC ACCESSION NO--AT0127547

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. LEVELS OF RADIONUCLIDE TRANSFERRED TO THE FETUS AND RADIONUCLIDE RETENTION IN THE PLACENTA DEPEND ON THE CHEMICAL CHARACTERISTICS OF THE NUCLIDE AND THE PERIOD OF PREGNANCY. THE PLACENTAL TRANSFER OF ALL NUCLIDES INCREASED BETWEEN MIDTERM (11 TO 15 DAYS OF GESTATION) AND THE END OF PREGNANCY. THE RATIOS OF THE NUCLIDE TRANSFERRED TOWARD TERM TO THAT TRANSFERRED EARLIER WERE PRIME239 PU, 1.7; PRIME241 AM, 2.8 TO 4.5; PRIME137 CS, HTO, AND PRIME237 NP, 5; PRIME90 SR, 20; AND PRIME131 I, 1700 TO 6000. THE CONTENT OF TRANSURANIC ELEMENTS IN THE PLACENTA AT ALL PERIODS OF PREGNANCY WAS 3 TO 15 TIMES HIGHER THAN IN THE FETUSES. RADIOINDUCED CHANGES IN THE EMBRYO DEPEND ON THE AMOUNT OF ACTIVITY INJECTED, THE DISTRIBUTION PATTERN, AND THE PHYSICAL PROPERTIES OF THE RADIONUCLIDE. THE MOST CHARACTERISTIC CHANGES AXSSOCIATED WITH THE VARIOUS RADIONUCLIDES ARE: PRIME90 SR, A DECREASE IN THE TRANSFER OF NUCLIDE FROM PLACENTA TO FETUS; PRIME241 AM, EARLIER INDUCTION OF RADIATION DISORDERS IN THE PLACENTA THAN IN THE FETUSES; PRIME131 I, OCCURRENCE OF RADIOINDUCED EMBRYOPATHY DEPENDS ON THE PRODUCTION OF DISORDERS IN THE MOTHER'S THYROID; HTO, GENERALIZED VASCULAR CHANGES IN THE MOTHERS AND FETUSES. FACILITY: MINISTRY OF PUBLIC HEALTH, MOSCOW.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

1/2 029 UNCLASSIFIED

TITLE--TREATMENT OF THE SURFACE OF TITANIUM ALLOYS -U- PROCESSING DATE--02OCT70

AUTHOR-(04)-BATRAKOV, V.P., PIVOVAROVA, L.N., VASKAN, L.A., YEGOROVA, T.M.

COUNTRY OF INFO--USSR

SOURCE--U.S.S.R. 261,091

REFERENCE--OTKRYTIYA, IZOBRET., PROM. OBRAZTSY, TOVARNYE ZNAKI 1970,

DATE PUBLISHED--06JAN70

SUBJECT AREAS--MATERIALS

TOPIC TAGS--TITANIUM ALLOY, METALLURGIC PATENT, NITRIC ACID, HYDROFLUORIC ACID, SURFACE AREA, HYDROGENATION

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1990/1788 STEP NO--UR/0482/70/000/000/0000/0000

CIRC ACCESSION NO--AA0109749

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

2/2 029 UNCLASSIFIED

CIRC ACCESSION NO--AA0109749 PROCESSING DATE--02OCT70

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE SURFACE OF TI ALLOYS WAS TREATED IN A SOLN. OF HF AND HNO SUB3. TO REMOVE A HYDROGENATED LAYER FROM THE SURFACE, THE SOLN. CONSISTED OF: HNO SUB3 (SP. GR. 1.4) 62-83, HF (SP. GR. 1.13) 16-17 WT. PERCENT AND WATER THE REMAINDER, AND THE PROCESS TOOK PLACE AT ROOM TEMP. FOR 3-10 MIN.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

UNCLASSIFIED

PROCESSING DATE--23OCT70

TITLE--DETERMINATION OF THE COORDINATES OF SOME GALACTIC SOURCES OF ANOMALOUSLY EXCITED HYDROXYL -U-

AUTHOR-(05)-BYSTROVA, N.V., GOSACHINSKIY, I.V., YEGOROVA, T.M., KARLOV, N.V., KRYNETSKIY, B.B.

COUNTRY OF INFO--USSR

SOURCE--DOKL. AKAD. NAUK SSSR 1970, 191(4), 791-4

DATE PUBLISHED--------70

SUBJECT AREAS--ASTRONOMY, ASTROPHYSICS

TOPIC TAGS--ASTRONOMIC OBSERVATORY, COORDINATE, GALAXY, GALACTIC RADIATION, HYDROXYL RADICAL

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3001/1573 STEP NO--UR/0020/70/191/004/0791/0794

CIRC ACCESSION NO--AT0127069

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

2/2 019 UNCLASSIFIED PROCESSING DATE--23OCT70

CIRC ACCESSION NO--AT0127069

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. RIGHT ASCENSIONS OF 4 SOURCES OF OH RADIATION WERE MEASURED IN 1969 IN THE MAIN ASTRONOMIC OBSERVATORY OF THE ACADEMY OF SCIENCES OF THE U.S.S.R. TWO SOURCES OF RADIATION, DETECTED IN 1968, CLOSELY COINCIDED WITH THE NMLCYG AND VYCMA OBJECTS. THE RADIOLINE OF OH IN THESE SOURCES HAD THE HIGHEST INTENSITY AT FREQUENCY OF 1612 MHZ AND ITS PROFILE WAS CHARACTERIZED BY THE PRESENCE OF 2 REGIONS OF RADIATION DIFFERING STRONGLY IN RADIAL VELOCITY. THIS CAN BE RELATED TO ROTATION, EXPANSION, OR COMPRESSION OF A GAS CLOUD. THE POSITION IN EACH RADIAL VELOCITY WAS MEASURED SEP.; RADIATION OF OH LINE WITH RADIAL VELOCITIES OF MINUS 24.2, 18.5, PLUS 21 KM, AND MINUS 10.5, MINUS 6.4, PLUS 45.5, PLUS 49.7, AND PLUS 52.8 KM PER SEC FOR NMLCYG AND VYCMA, RESP. OBSERVATION OF W49 AND SGR-B2 SOURCES WAS MADE AT 1655 MHZ. THE LINE OF OH RADIATION IN THE SGR-B2 SOURCE WAS MEASURED AT RADIAL VELOCITY OF PLUS 67.7 KM PER SEC. FACILITY: RYZHKOV, N. F., FIZ. INST. IM. LEBEDEVA, MOSCOW, USSR.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

1/2 016 UNCLASSIFIED

TITLE--ELECTRETS FROM POLYMERIC FILMS -U- PROCESSING DATE--02OCT70

AUTHOR-(04)-GUBKIN, A.N., YEGOROVA, T.S., KOKORIN, L.M., ZITSER, N.E.

COUNTRY OF INFO--USSR

SOURCE--VYSOKOMOL. SOEDIN. SER. A 1970 12(3) 602-9

DATE PUBLISHED--------70

SUBJECT AREAS--MATERIALS, PHYSICS

TOPIC TAGS--ELECTRET, POLYMER FILM, POLYETHYLENE TEREPHTHALATE, POLYTETRAFLUOROETHYLENE, ELECTRIC POLARIZATION

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1992/0307 STEP NO--UR/0459/70/012/003/0602/0609

CIRC ACCESSION NO--AP0111501

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APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

2/2 016 UNCLASSIFIED PROCESSING DATE--02OCT70

CIRC ACCESSION NO--AP0111501

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. POLY(ETHYLENE TEREPHTHALATE) (I) FILMS AND POLY(TETRAFLUOROETHYLENE) (II) FILMS WERE POLARIZED BY HEATING TO 110DEGREES AND 135DEGREES, RESP., IN POLARIZING FIELDS FOR SIMILAR TO 1 HR AND THEN BY ALLOWING THEM TO COOL IN THESE FIELDS TO ROOM TEMP. THE POLARIZATION, MEASURED BY THE RATIO OF THE INDUCED TO THE ORIGINAL CHARGE D., PERSISTED FOR LARGER THAN OR EQUAL TO 8 MONTHS AND LASTED LONGER FOR II THAN FOR I FILMS. THE POLARIZATION AND ITS DURABILITY INCREASED WITH THE FILM THICKNESS AND THE POLARIZING FIELD STRENGTH. WEAK HETEROCHARGING (SIMILAR TO 10 PRIME NEGATIVE10 COULOMB-CM PRIME2) WAS OBSD. ONLY IN THE CASE OF I FILMS AT SMALLER THAN OR EQUAL TO 50 KV-CM FIELD STRENGTHS. IN THE CASE OF II THE FILMS HAD ONLY CHARGES OF THE SAME SIGN. THE NEW EXPTL. AND THE LITERATURE DATA, GIVEN FOR OTHER ELECTRETS, ARE DISCUSSED IN TERMS OF THE SWAN GUBKIN THEORY.

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UDC 669.715.721.725.295.296.74.26.018.29(088.8

BELOUSOV, N. N., MIKHEYEVA, Ye. N., ZHOLOBOVA, Ye. P., KASHEVNIK, L. Ya., DODONOV, A. A., YEGOROVA, V. A., YEVSTRATOV, Yu. A., POPKOVA, V. A., BOTYANOVSKIY, M. G.

"Aluminum-Based Casting Alloy"

USSR Author's Certificate, No. 253375, Filed, 19/06/67, Published, 8/10/70. (Translated from Referativnyy Zhurnal Metallurgiya, No. 5, 1971, Abstract No. 5 I670P).

Translation: The alloy has the following composition (%): Mg 8-9.5, Be 0.03-0.15, Ti 0.05-0.15, Zr 0.05-0.2, Mn 0.1-0.3, Cr 0.05-0.15, remainder Al. The alloy has high technological properties, corrosion resistance, and stability of properties. In the cast state, the alloy, when cast in a sand mold, has σ_b 18-23 kg/mm^2, δ 0.7 - 2.5%, a_H 0.2-0.4 kgm/cm^2; when cast in a chill mold - σ_b 27-33 kg/mm^2, δ 4 - 12%, a_H 0.4 - 1.2 kgm/cm^2.

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UDC 616.932-08-092

DZHAPARIDZE, M. N., MARTENS, L. A., YEGOROVA, V. D., and OGARENKO, N. B.,
All Union Antiplague Institute "Mikrob" (Director: prof. N. I. Nikolayev),
Saratov

"The Problem of Pathogenetic Therapy of Intoxication Caused by Endotoxins of Cholera and El-Tor Vibrion"

Moscow, Patologicheskaya Fiziologiya i Eksperimental'naya Terapiya, No 5, Sep/Oct 73, pp 75-78

Abstract: A study of respiration of mitochondria of the liver, heart, kidneys and small intestine of laboratory animals in a Warburg apparatus in the presence of malate, succinate and -ketoglutarate demonstrated that inhibition caused by endotoxin of cholera (strains No 596B Inaba and No 149 Ogava) or El-Tor vibrion (strains T-4 Inaba and No 573 Ogava) was eliminated only by an elevation of the concentration of malate. At the height of the disease mitochondria of animals affected with endotoxin oxidized malate much less than the intact animals. Administration of malate to C57Bl mice infected with endotoxins was accompanied by an increase in the intermediates of the Krebs' cycle in tissues, producing a therapeutic effect. It has been concluded that
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DZHAPARIDZE, M. N., et al., Patologicheskaya Fiziologiya i Eksperimental'naya Terapiya, No 5, Sep/Oct 73, pp 75-78

malate should be included in the composition of the fluid used for rehydration of the patients suffering from cholera, particularly when the administration was to be oral or through a stomach tube.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

1/2 020 UNCLASSIFIED PROCESSING DATE--11SEP70

TITLE--THE INFLUENCE OF CHOLERA VIBRION ENDOTOXINS ON THE RESPIRATION OF HEPATIC MITOCHONDRIA IN THE PRESENCE OF KREBS'S CYCLE SUBSTRATS -U-

AUTHOR--DZHAPARIDZE, M.N., MARTENS, L.A., YEGOROVA, V.D.

COUNTRY OF INFO--USSR

SOURCE--BYULLETEN'EKSPERIMENTAL'NOY BIOLOGII I MEDITSINY, 1970, VOL 69, NR 4, PP 66-69

DATE PUBLISHED--------70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES

TOPIC TAGS--CHOLERA, BACTERIAL ENDOTOXIN, WHITE RAT, DEHYDROGENASE, GUINEA PIG

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1990/1743 STEP NO--UR/0219/70/069/004/0066/0069

CIRC ACCESSION NO--AP0109704

ZZZZZZZZZZZZ UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

2/2 020 UNCLASSIFIED PROCESSING DATE--11SEP70

CIRC ACCESSION NO--AP0109704

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE ARTICLE IS CONCERNED WITH THE STUDY OF CHOLERA VIBRION ENDOTOXINS, ISOLATED BY MEANS OF BUAWEN'S TECHNIQUE OR FILTRATION ON SEPHADEX G-200, ON THE RESPIRATION OF HEPATIC MITOCHONDRIA OF GUINEA PIGS AND ALBINO RATS IN THE PRESENCE OF KREBS CYCLE SUBSTRATES. THE RESPIRATION INTENSITY WAS ASSESSED MANOMETRICALLY IN WARBURG'S APPARATUS AND CHROMATOGRAPHICALLY BY THE DEPLETION OF SUBSTRATES. THE AUTHORS ESTABLISHED AN INHIBITING EFFECT OF VIBRION ENDOTOXINS ON THE RESPIRATION OF MITOCHONDRIA IN THE PRESENCE OF MALATE, OXALACETATE, ALPHAKETOGLUTARATE AND PYRUVATE. THE TOXINS DID NOT INFLUENCE THE OXIDATION OF SUCCINATE, CITRATE AND RESTORED NAD. A CONCLUSION IS MADE ON INJURY OF NAD DEPENDENT DEHYDROGENASES OF KREBS'CYCLE.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

1/2 044 UNCLASSIFIED PROCESSING DATE--30OCT70

TITLE--ISOLATION OF A LONGITUDINAL OSCILLATION MODE IN SOLID STATE LASERS -U-

AUTHOR-(05)-GALAKTICNOVA, N.M., GARKAVI, G.A., YEGOROVA, V.F., MAK, A.A., FROMZEL, V.A.

COUNTRY OF INFO--USSR

SOURCE--OPTIKA I SPEKTROSKOPIIA, VOL. 28, APR. 1970, P. 751-758

DATE PUBLISHED----APR70

SUBJECT AREAS--PHYSICS

TOPIC TAGS--SOLID STATE LASER, RESONATOR, SINGLE MODE LASER, LUMINESCENCE SPECTRUM, LINE BROADENING, LASER PUMPING, NEODYMIUM GLASS

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--2000/1225 STEP NO--UR/0051/70/028/000/0751/0758

CIRC ACCESSION NO--AP0124879

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

2/2 044 UNCLASSIFIED

CIRC ACCESSION NO--AP0124879 PROCESSING DATE--30OCT70

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. ANALYTICAL DETERMINATION OF THE CONDITIONS UNDER WITH A SOLID STATE LASER WITH A COMPLEX RESONATOR WILL OPERATE IN A SINGLE AXIAL MODE (CONDITIONS UNDER WHICH NO OTHER AXIAL MODES CAN BE EXCITED BECAUSE OF THEIR LARGE LOSSES). THE ANALYSIS IS PERFORMED FOR ACTIVE MEDIA VARYING IN THE NATURE OF LUMINESCENT LINE BROADENING, AND ABOVE THRESHOLD PUMPING POWERS. THE INFLUENCE OF THE NATURE OF LUMINESCENT LINE BROADENING ON THE SELECTIVE CHARACTERISTICS OF A RESONATOR CONTAINING A FABRY PEROT ETALON IS EXAMINED, SHOWING THAT INHOMOGENEOUS BROADENING MAKES IT DIFFICULT TO OBTAIN A SINGLE AXIAL MODE. THE THEORETICAL RESULTS ARE VERIFIED BY EXPERIMENTS PERFORMED WITH A PULSED NEODYMIUM GLASS LASER AT ABOVE THRESHOLD PUMPING POWERS.

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USSR

UDC 678.743.22:66.095.268

DAKIN, V. I., YEGOROVA, Z. S., and KARPOV, V. L.

"The Effect of Triallyl Esters of Cyanuric or Isocyanuric Acids on the Radiation Crosslinking of Polyvinyl Chloride"

Moscow, Plasticheskiye Massy, No 6, 1973, pp 37-38

Abstract: It was shown that the effectiveness of the crosslinking of polyvinyl chloride compositions containing the triallyl ester of cyanuric or isocyanuric acids is identical. Therefore the radicals forming during the isomerization process of triallyl ester of cyanuric acid into the isocyanuric acid are of no consequence as far as the spacial structure of the composition is concerned. These data support the hypothesis of the reaction mechanism based on the formation of free radicals due to the splitting of low molecular weight fragments from the allyl group and from the macromolecules of the polymer itself.

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USSR UDC 678.643'42'5:66.018.86.01:536

BAKAYEVA, V. P., YEGOROVA, Z. S., and KARPOV, V. L.

"Thermal Stability of E-41 Epoxy Resin after γ-Radiation"

Moscow, Plasticheskiye Massy, No 5, 1973, pp 20-24

Abstract: Some results are described from a study by the methods of mass spectrometry, derivatography and infrared spectrometry of the thermal stability of epoxy resins congealed by different congealants and subjected to gamma radiation in the dosage range of 50-1,000 Mrads.

The thermal stability of the uncongealed epoxy resin depends on the molecular weight, and the thermal stability of the congealed epoxy resin after irradiation and the radiation resistance depend on the type of congealant. The thermal destruction of the nonirradiated and irradiated congealed epoxy resins depends on the irradiation medium. The quantity and composition of the gases released during irradiation of the epoxy resins congealed by different congealants will depend on the irradiation temperature.

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USSR

SMETANINA, L. B., LESHCHENKO, S. S., YEGOROVA, Z. S., STARODUBTSEV, D. S., KLINSHPONT, E. R., KAPLUNOV, M. Ya., and KARPOV, V. L., Scientific Research Physico-Chemical Institute imeni L. Ya. Karpov

"Radiation Structuralization of Ethylenepropylene Rubber in Presence of N-Phenylmaleimide Sensitizer"

Moscow, Vysokomolekulyarnyye Soyedineniya, Vol 12, No 11, Nov 70, pp 2,401-2,407

Abstract: The process of radiation structuralization of ethylenepropylene rubber [SKEP] and its mixtures with N-phenylmaleimide [NPMI] was studied. It was determined that NPMI is a sensitizer for radiation crosslinking of SKEP, the rate of gel-formation being directly proportional to the quantity of NPMI added. The effect is neither ionic nor radical; addition of NPMI does not affect the production of free radicals and the recombination of the radicals is identical with or without NPMI; liberation of charges trapped in the traps shows also no effect on the process. It has been proposed that NPMI acts as an acceptor of hydrogen during the γ-irradiation, being reduced to N-phenylsuccinimide in the process. Thus it aids in production of more vinylidene bonds in SKEP and accelerates the crosslinking of SKEP.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

1/2 018 UNCLASSIFIED PROCESSING DATE--27NOV70

TITLE--STRUCTURE FORMATION OF ETHYLENE PROPYLENE RUBBER UNDER THE INFLUENCE OF GAMMA RADIATION -U-

AUTHOR-(04)-SMETANINA, L.B., LESHSHENKO, S.S., YEGOROVA, Z.S., KARPOV, V.L.

COUNTRY OF INFO--USSR

SOURCE--KHIM. VYS. ENERG. 1970, 4(3), 274-5

DATE PUBLISHED-------70

SUBJECT AREAS--MATERIALS, NUCLEAR SCIENCE AND TECHNOLOGY

TOPIC TAGS--ETHYLENE, PROPYLENE, COPOLYMER, RUBBER, GAMMA RADIATION, POLYMER CROSSLINKING, GEL

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3008/0867 STEP NO--UR/0456/70/004/003/0274/0275

CIRC ACCESSION NO--AP0137895

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

2/2 018 UNCLASSIFIED

CIRC ACCESSION NO--AP0137895 PROCESSING DATE--27NOV70

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE IRRAND. OF ETHYLENE PROPYLENE COPOLYMER (I) IN AIR CAUSES AN INCREASE OF THE GEL FRACTION TO A MAX. OF 54PERCENT AND A SUBSEQUENT DECREASE DUE TO DEGRADATION. IN VACUUM OR IN HE, THE IRRADN. CAUSES THE FORMATION OF VINYLIDENE END GROUPS WHICH REACT TO FORM CROSSLINKS. NEOZONE D PRESENT IN COM. I ALSO REACTS WITH THESE END GROUPS THUS SLOWING THE GEL FORMATION RATE. FACILITY: FIZ. KHIM. INST. IM. KARPOVA, MOSCOW, USSR.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

USSR

UDC 539.3:534.1

YEGORYCHEV, O. A.

"Vibration of the Elastic Lid and Bottom of a Cylindrical Tank Filled with an Elastic Medium"

Kiev, Prikladnaya Mekhanika, Vol 9, No 1, Jan 73, pp 40-45

Abstract: Consideration is given to a dynamic problem of the vibration of the elastic lid and bottom of a round cylindrical tank filled with an elastic medium, during the action of a pulse load upon the tank top. The problem is reduced to the solution of a system of hyperbolic equations that describe the vibrations of the elastic lid and bottom. In a particular case the tank bottom is rigid, and the vibratory process takes place only in the tank lid. Laplace time transforms are used to determined the displacement of the lid, and thereafter the problem is reduced to the solution of an ordinary equation. The problem is solved completely. 3 figures, 2 references.

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1/2 033

UNCLASSIFIED

PROCESSING DATE--09OCT70

TITLE--INTERACTION OF MOLYBDENUM ZIRCONIUM AND MOLYBDENUM TITANIUM ALLOYS WITH CARBON AND OXYGEN CONTAINING GAS MEDIUM -U-

AUTHOR-(03)-AGEYEV, N.V., YEGOSHINA, S.G., MODEL, M.S.

COUNTRY OF INFO--USSR

SOURCE--DOKL. AKAD. NAUK SSSR 1970 190(6) 1345-7

DATE PUBLISHED--------70

SUBJECT AREAS--MATERIALS

TOPIC TAGS--MOLYBDENUM ALLOY, ZIRCONIUM ALLOY, TITANIUM ALLOY, CARBON, OXYGEN, SOLID SOLUTION, CARBIDE, OXIDE, CRYSTAL LATTICE PARAMETER

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1990/0225

STEP NO--UR/0020/70/190/006/1345/1347

CIRC ACCESSION NO--ATC108549

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

2/2 033 UNCLASSIFIED PROCESSING DATE--09OCT7(

CIRC ACCESSION NO--AT0108549

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE EQUIL. IN MO-ZR AND MO-TI ALLOYS WHEN HEATED IN A GAS MEDIUM CONTG. C AND OTHER IMPURITIES SOL. IN MO WHICH FORM SOLID SOLNS., IS DESTROYED. THIS IS DUE TO THE SUBSTITUTION OF ZR WHICH SEPS. COMPLETELY FROM THE ALLOY AND COLLECTS AS CARBIDES OR OXIDES ON THE SURFACE. SOLNS. OF LESS THAN OR EQUAL TO 15PERCENT TI AFFECT THE LATTICE PARAMETERS VERY LITTLE, BUT MO-ZR SOLID SOLNS. ARE DESTROYED COMPLETELY BY C AND O.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

1/2 016 UNCLASSIFIED PROCESSING DATE--02OCT70

TITLE--STABILITY OF INTERSTITIAL SOLID SOLUTIONS IN MOLYBDENUM -U-

AUTHOR-(03)-AGEYEV, N.V., YEGOSHINA, S.G., MODEL, M.S.

COUNTRY OF INFO--USSR

SOURCE--AKADEMIIA NAUK SSSR, DOKLADY, VOL. 109, FEB 11, 1970, P. 1155-1158

DATE PUBLISHED--11FEB70

SUBJECT AREAS--MATERIALS

TOPIC TAGS--SOLID SOLUTION, MOLYBDENUM, BIBLIOGRAPHY, INTERSTITIAL NITRIDE

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1990/0293 STEP NO--UR/0020/70/190/000/1155/1158

CIRC ACCESSION NO--AT0108591

UNCLASSIFIED

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

2/2 016 UNCLASSIFIED

CIRC ACCESSION NO--AT0108591 PROCESSING DATE--02OCT70

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. STUDY OF THE STABILITY OF INTERSTITIAL SOLID SOLUTIONS OF CAST MOLYBDENUM WITH POSSIBLE LARGE LATTICE CONSTANTS, AND MOLYBDENUM CONTAINING 0.014 C. THE SAMPLES WERE SUBJECTED TO HEAT TREATMENT IN THE CAST AND DEFORMED STATE. IT IS FOUND THAT THE INTERSTITIAL SOLID SOLUTIONS WHICH WERE NOT DECOMPOSED DURING COOLING OF THE INGOTS ARE QUITE STABLE. EVEN ADDITIONS OF METALS OF GROUP IVA DO NOT RESULT IN THEIR COMPLETE DECOMPOSITION.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

1/2 021 UNCLASSIFIED PROCESSING DATE--20NOV70

TITLE--FORM COEFFICIENT OF SUPERCONDUCTIVE SYNCHRONOUS MACHINE FIELD -U-

AUTHOR-(04)-BERTINOV, A.I., GOLOVKIN, A.V., YEGOSHKINA, L.A., MIRCHUK, O.M.

COUNTRY OF INFO--USSR

SOURCE--ELEKTROTEKHNIKA (ELECTRICAL ENGINEERING), 1970, NO 1, PP [illegible]

DATE PUBLISHED--------70

SUBJECT AREAS--ELECTRONICS AND ELECTRICAL ENGR.

TOPIC TAGS--SYNCHRONOUS GENERATOR, FERROMAGNETIC SUPERCONDUCTIVITY, MAGNETIC FIELD

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3004/0250 STEP NO--UR/0292/70/000/001/0043/0046

CIRC ACCESSION NO--AP0120037

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

2/2 021 UNCLASSIFIED

CIRC ACCESSION NO--AP0130987 PROCESSING DATE--20NOV70

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE USE OF SUPERCONDUCTIVE EXCITATION WINDINGS FOR SYNCHRONOUS MACHINES LEADS TO NEW CONFIGURATIONS WHICH REQUIRE MODIFICATION OF THE FUNDAMENTALS OF SUPERCONDUCTIVE MACHINE THEORY. IN THIS STUDY A SIGNEL EXPRESSION IS OBTAINED FOR DETERMINING THE RADIAL COMPONENT OF THE MAGNETIC FIELD INTENSITY IN CLOSED FORM AND THE FORM COEFFICIENT OF THE SUPERCONDUCTIVE SYNCHRONOUS MACHINE FIELD IS DETERMINED. THE DISTRIBUTION OF THE MAXIMUM OF THE MAGNETIC FIELD INTENSITY RADIAL COMPONENT ALONG THE RADIUS IS GIVEN AS A FUNCTION OF THE NUMBER OF POL- PAIRS AND THE RATIO OF THE GEOMETRIC DIMENSIONS OF THE EXCITATION WINDING. THE ANALYSIS SHOWS THAT THE HIGHER HARMONICS HAVE THE HIGHEST VALUE WITHIN THE WINDING.

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USSR

YEGOV, V. A.

"The Kolmogorov Theorem on the Rule of the Repeating Logarithm"

Vestn. Leningr. Un-ta. [Leningrad University Herald], 1972, No 13, pp 140-142 (Translated from Referativnyy Zhurnal, Kibernetika, No 1, 1973, Abstract No 1 V34 by the author).

Translation: Suppose $\{X_n\}$ is a sequence of independent random quantities, $EX_n = 0$, $EX_n^2 < \infty$ $(n = 1, 2, \ldots)$. Suppose $S_n = \sum_{j=1}^{n} X_j$, $ES_n^2 = B_n$. A sequence of independent random quantities $\{X_n\}$ is constructed, satisfying the following conditions

$$B_n \to \infty, \ |X_n| = O\left(\sqrt{\frac{B_n}{\ln \ln B_n}}\right)$$

and

$$P\left(\limsup \frac{|S_n|}{\sqrt{2 B_n \ln \ln B_n}} > 1\right) = 1. \qquad (*)$$

Equation (*) is proven using a theorem on large deviations. The proof of equations (*) is simpler than in the work of Weiss (RZhMat, 1960, 1894).

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USSR UDC: 621.374.44

LEVKOV, B. Yu. and YEGUDOV, S. M.

"Solid-State Switched Frequency Multiplier"

Moscow, Radiotekhnika, Vol 26, No 1, 1971, pp 86-93

Abstract: Although the switching capability of frequency multipliers has been known since 1938, it has only been investigated thoroughly in the past few years. This paper discusses the potential possibilities of solid-state switched frequency multipliers and analyzes their electrical characteristics in relation to the type of circuit, the mode of operation, and the types of input oscillation. The nature of such circuits is mathematically analyzed, and it is shown that their efficiency is doubled if the number of output channels is doubled. To realize the circuit in solid-state form, a neuristor must be used to form forbidding connections in which the passage of the signal along one line forbids its passage along another. A block diagram of the circuit is given, and it is analyzed under assumption that all the circuit elements are ideal. On this basis, the efficiencies of diode and transistorized circuits are estimated. It is asserted that in integrated form, such circuits can be used in uhf. The authors express their gratitude to V. S. Andreyev for his remarks.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

USSR UDC 621.3.049.75

KOPYLOV, S. G., KAZAKOV, S. N., YEGUNOV, A. V., KUZ'MICHEV, V. S., MELIK-OGANDZHANYAN, P. B., IGNATOV, B. M., FEDOTOV, V. A., YAKOVLEV, YE. G.

" Multilayer Printed Board"

Moscow, Otkrytiya, Izobreteniya, Promyshlennyye Obraztsy, Tovarnyye Znaki, No 16, 8 May 70, p 43, Patent No 270029, Filed 4 Mar 68

Translation: This Author's Certificate introduces a multilayer printed board containing alternating layers of dielectric and electrically conducting material designed for mounting integral circuits with flat leads in which grooves are cut out on both sides of the integral circuit. The interlayer connections are made in these grooves. They are executed by welding or soldering. The board is distinguished by the fact that in order to insure high density of arrangement of highly reliable interlayer connections with a minimum number of them and also to lower the labor involved in manufacturing the boards, the interlayer connections are executed in the form of bunches of printed conductors made during the process of pressing the multilayer printed board, and the number of bunches leading into the groove is determined by the number of leads of the integral circuits mounted on the board.

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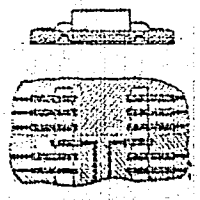
KOPYLOV, S. G., et al., Otkrytiya, Izobreteniya, Promyshlennyye Obraztsy, Tovarnyye Znaki, No 16, 8 May 70, p 43, Patent No 270029, Filed 4 Mar 68



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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

1/2 014 UNCLASSIFIED PROCESSING DATE--27NOV70

TITLE--QUANTITATIVE RELATIONS OF THE AREAS OF THE PEAKS ON HEATING AND COOLING CURVES -U-

AUTHOR-(02)-BERG, L.G., YEGUNOV, V.P.

COUNTRY OF INFO--USSR

SOURCE--ZH. NEORG. KHIM. 1970, 15(6), 1694-5

DATE PUBLISHED--------70

SUBJECT AREAS--CHEMISTRY

TOPIC TAGS--AMMONIUM CHLORIDE, SODIUM CHLORIDE, PHASE TRANSITION, TRANSITION TEMPERATURE, SOLUTION CONCENTRATION

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3006/1406 STEP NO--UR/0078/70/015/006/1694/1695

CIRC ACCESSION NO--AP0135080

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

2/2 014

UNCLASSIFIED

CIRC ACCESSION NO--AP0135080 PROCESSING DATE--27NOV70

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. DILN. OF NH SUB4 CL SAMPLE WITH AN INERT COMPD., LIKE NACL, PRACTICALLY DID NOT CHANGE THE TEMP. OF ITS PHASE TRANSITIONS BUT DECREASED MARKEDLY THE DIFFERENCE OF AREAS UNDER HEATING AND COOLING CURVES REPRESENTING THE DURATION AND THE TEMP. OF THESE TRANSITIONS. FACILITY: KAZAN. GOS. UNIV. IM. UL'YANOVA-LENINA, KAZAN, USSR.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

1/2 021 UNCLASSIFIED

TITLE--BASES FOR THE CALCULATION OF SPECIFIC HEATS BY A DIFFERENTIAL THERMAL ANALYSIS METHOD -U-

PROCESSING DATE--23OCT70

AUTHOR-(02)-BERG, L.G., YEGUNOV, V.P.

COUNTRY OF INFO--USSR

SOURCE--ZH. FIZ. KHIM. 1970, 44(3), 778-80

DATE PUBLISHED--------70

SUBJECT AREAS--PHYSICS

TOPIC TAGS--SPECIFIC HEAT, PHASE TRANSITION

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1997/1999

STEP NO--UR/0076/70/044/003/0778/0780

CIRC ACCESSION NO--AP0120642

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

2/2 021 UNCLASSIFIED

CIRC ACCESSION NO--AP0120642 PROCESSING DATE--23OCT70

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE SP. HEAT (C SUB0) OF SUBSTANCES CHARACTERIZED BY PHASE TRANSITION OF UNKNOWN HEAT EFFECT CAN BE DETD. BY USING THE METHOD OF AN INTERNAL STD. AN INTERNAL STD. HAVING A PHASE TRANSITION CAN BE EMPLOYED ALSO IN THE CASE WHEN THE STUDIED SUBSTANCE ITSELF DOES NOT HAVE ANY TRANSITION IN THE CORRESPONDING TEMP. REGION., THE SP. HEAT AND PHASE TRANSITION HEAT EFFECT OF KNO SUB3 WAS DETD. WITH THE USE OF AL SUB2 O SUB3 AS AN INTERNAL STD., WITH AN ACCURACY CHARACTERIZED BY A MEAN QUADRATT DEVIATION, SIGMA SMALLER THAN OR EQUAL TO 2.18PERCENT.

FACILITY: KAZAN. GOS. UNIV. IM. UL'YANOVA-LENINA, KAZAN, USSR.

UNCLASSIFIED

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

USSR

UDC: 532.52

YEGUPOV, B. M., KATORGIN, B. I., SOLONIN, V. I.

"Mixing of Dissimilar Jets and Accompanying Equal-Velocity Flow"

Tr. Mosk. vyssh. tekhn. uch-shcha imeni N. E. Baumana (Works of the Moscow Higher Technical Academy imeni N. E. Bauman), 1971, No 144, pp 64-70 (from RZh-Mekhanika, No 5, May 72, Abstract No 5B971)

Translation: An experimental study is done on mixing of a jet escaping from a nozzle 20 mm in diameter with an accompanying flow of the same velocity. The outside diameter of the accompanying jet was 55 mm. The thickness of the nozzle edge was 0.25 and 2 mm. The initial boundary layers were transitional or well-developed turbulent layers, and they had a thickness of 0.5-3.5 mm. The nature of the density field was studied in the wake behind the edge at various distances from it. The ratio of the density of the accompanying flow to the density of the jet varied from 0.033 to 7.2. The relation between the coefficient of diffusion and conditions of jet escape is analyzed. The initial conditions of escape were varied by installing screens of various porosities at the tip of the nozzle to cover the jet and the accompanying flow. Experimental curves for the

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

USSR

YEGUPOV, B. M. et al., Tr. Mosk. vyssh. tekhn. uch-shcha imeni N. E. Baumana, 1971, No 144, pp 64-70

coefficient of diffusion of the material as a function of the longitudinal coordinate are found for flow with initial boundary layers and for flow with screens on the tip of the nozzle. L. N. Ukhanova.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

USSR UDC 517.925.3

YEGUPOV, N. D., DMITRIYEV, A. N., Moscow Higher Technical Academy imeni Bauman

"An Approximation Method of Integrating Differential Equations With Polynomial Coefficients"

Minsk, Differentsial'nyye Uravneniya, Vol 9, No 4, Apr 73, pp 609-613

Abstract: An approximation method is proposed for solving ordinary linear differential equations of the form

$$\sum_{\nu=0}^{n} a_\nu(t)\, x^{(\nu)} = y(t),$$

satisfying the following conditions: a) $x(0) = x_0,\ x'(0) = x_1, \ldots, x^{(n-1)}(0) = x_{n-1}$; b) $\{a_i(t)\}$ $(i = 0, 1, \ldots, n)$ are continuous functions $t \in [0, \infty)$; c) y(t) is the original of an integral Laplace transform; d) t is a real variable. The solution $x(t) \in L_2[0, \infty)$ is found in the form of an expansion in an orthogonal series. The proposed method is analytical but, at the same time, is readily programmable for digital computers. A numerical example is given.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

USSR UDC: 621.372

DMITRIYEV, A. N., YEGUPOV, N. D.

"Problems of Analyzing Linear Systems Which Have Random Parameters"

Tr. nauchn.-tekhn. konferentsiy. Kaluzh. obl. sovet nauch.-tekhn. o-v (Works of Scientific and Technical Conferences. Kaluga Regional Council of Scientific and Technical Societies), Kaluga, 1970, pp 105-107 (from RZh-Radiotekhnika, No 6, Jun 71, Abstract No 6A103)

Translation: The authors investigate the statistical properties of elements of the generalized spectral characteristic of a closed linear system with random parameters. Bibliography of one title. N. S.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

YEGUTKIN A.S.

Acc. Nr.: AN0104123 Ref. Code: UR9003

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

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

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

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

Acc. Nr.: AN0104123

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

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

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

1/2 009 UNCLASSIFIED

TITLE--SYNTHESIS OF CARBOXYLIC ACID DERIVATIVES FROM CARBON MONOXIDE, OLEFINS, AND ACYLATING COMPOUNDS UNDER ACID CATALYSIS CONDITONS. 30.

PROCESSING DATE--23OCT70

AUTHOR-(03)-YANG, Y.P., PUZITSKIY, K.V., YEIDUS, YA.T.

COUNTRY OF INFO--USSR

SOURCE--IZV. AKAD. NAUK SSSR, SER. KHIM. 1970, (2), 424-30

DATE PUBLISHED--------70

SUBJECT AREAS--CHEMISTRY

TOPIC TAGS--ISOBUTYLENE, BUTANOL, CARBON MONOXIDE, CARBOXYLIC ACID, CHEMICAL SYNTHESIS, CATALYST

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1997/0855

STEP NO--UR/0062/70/000/002/0424/0430

CIRC ACCESSION NO--AP0119759

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

2/2 009 UNCLASSIFIED PROCESSING DATE--23OCT70

CIRC ACCESSION NO--AP0119759

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. KINETIC DATA WERE SHOWN GRAPHICALLY FOR THE TITLE REACTION OF CARBONYLATION OF ISO,BUOH WITH VARIOUS PROPORTIONS OF ROH, BF SUB3 H SUB2 O AND CO PRESSURE AT 100DEGREES. THE MAIN PRODUCTS OF THE REACTION ARE ME SUB3 CCO SUB2 H (I) AND ITS ISO,BU ESTER (II). THEIR YIELDS AND PROPORTIONS ARE AFFECTED BY TEMP. AND CATALYST CONCN. CARBONYLATION OF ME SUB2 C:CH SUB2 GAVE MAINLY ME SUB3 CCO SUB2 H. THE YIELD IN I IN THE 1ST REACTION SEQUENCE DECLINED FROM 70-80PERCENT WHEN THE PROPORTION OF ROH TO THE CATALYST WAS RAISED FROM 1.0 TO 2.0 OR 3.0 AND BECAME VERY LOW AT THE RATIO OF 2.0. THE YIELD OF II REACHED A MAX. (LARGER THAN 85PERCENT) AT 2:1 RATIO OF ROH TO CATALYST. THE YIELDS OF 2,2,4,4,TETRAMETHYLPENTACARBOXYLIC ACID AND TRIMERIC C SUB13 ACID ROSE MODERATELY ON INCREASING THE RATIO OF ME SUB2 C:CH SUB2 TO THE BF SUB3 CATALYST FROM 0.5 TO 1.0 AND TO 1.5. THE BEST YIELD OF II OF 89PERCENT WAS REACHED WITH ROH,CATALYST RATIO 2:1; THIS MADE POSSIBLE A CONTROL OF THE REACTION TO YIELD EITHER I OR II AS THE MAIN PRODUCT. A REACTION SCHEME WAS PROPOSED. FACILITY: INST. ORG. KHIM. IM. ZELINSKOGO, MOSCOW, USSR.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

1/2 014 UNCLASSIFIED

TITLE--PHASE EQUILIBRIUMS IN SYSTEMS INVOLVING ALKALI METAL METABORATES -U- PROCESSING DATE--13NOV70

AUTHOR-(03)-LESNYKH, D.S., YEIKHENBAUM, I.G., CHERNYAKHOVSKAYA, S.A.

COUNTRY OF INFO--USSR

SOURCE--ZH. NEORG. KHIM. 1970, 15(3), 824-8

DATE PUBLISHED--------70

SUBJECT AREAS--CHEMISTRY

TOPIC TAGS--TERNARY FLUID SYSTEM, PHASE EQUILIBRIUM, ALKALI METAL HALIDE, BORATE, MELTING POINT, EUTECTIC

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1994/1375

STEP NO--UR/0078/70/015/003/0824/0828

CIRC ACCESSION NO--AP0115694

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

2/2 014

UNCLASSIFIED

CIRC ACCESSION NO--AP0115694 PROCESSING DATE--13NOV70

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. PHASE EQUIL. WERE DETD. IN THE MUTUAL TERNARY SYSTEMS LI PRIME POSITIVE, NA PRIME POSITIVE MAGNITUDE OF CL PRIME NEGATIVE, BO SUB2 PRIME NEGATIVE AND NA PRIME POSITIVE, CS PRIME POSITIVE MAGNITUDE OF BR PRIME NEGATIVE, BO SUB2 PRIME NEGATIVE AND PROJECTIONS OF THEIR PHASE DIAGRAM ARE GIVEN. THE DIAGONAL SECTIONS OF LI PRIME POSITIVE, NA PRIME POSITIVE MAGNITUDE OF CL PRIME NEGATIVE, BO SUB2 PRIME NEGATIVE, OF NA PRIME POSITIVE, CS PRIME POSITIVE MAGNITUDE OF BR PRIME NEGATIVE, BO SUB2 PRIME NEGATIVE, OF NA PRIME POSITIVE (K PRIME POSITIVE, RB PRIME POSITIVE, CS PRIME POSITIVE) MAGNITUDE OF CL PRIME NEGATIVE, BO SUB2 PRIME NEGATIVE, OF NA PRIME POSITIVE (K PRIME POSITIVE, RB PRIME POSITIVE) MAGNITUDE OF BR PRIME NEGATIVE, BO SUB2 PRIME NEGATIVE, AND OF NA PRIME POSITIVE (K PRIME POSITIVE, RB PRIME POSITIVE) MAGNITUDE OF I PRIME NEGATIVE, BO SUB2 PRIME NEGATIVE ARE PRESENTED. SUBSTITUTION OF LESS POLARIZABLE FOR A MORE POLARIZABLE ION IN THESE SYSTEMS CAUSES PHASE SEPN. AND M.P. OF 14 EUTECTICS OF THESE SYSTEMS ARE GIVEN.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

Acc. Nr: AP0036527

Ref. Code: UR 0069

PRIMARY SOURCE: Kolloidnyy Zhurnal, 1970, Vol 32, Nr 1, pp 41-48

ADSORPTION AND ADSORPTION HEATS OF VAPORS ON GEOMETRICALLY MODIFIED SILICA GELS

Yekabson, Ya. Ya.; Kiselev, A. V.; Kyznetsov, B. V.; Nikitn, Yu. S.

The measurements of the adsorption extent and adsorption heats of water and benzene vapors have shown that macroporous silica gels obtained by hydrothermal treatment in an autoclave followed by calcination at 900 and 1000° for 6—10 hours and rehydroxylation contain very few ultrapores and in respect to their surface chemistry are similar to silica without ultrapores. A longer calcination of macraporous silica gel at 1000° leads to the appearance of microcracks in it and to an increase of its ultraporosity.

D.R.

REEL/FRAME
19721375

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

1/2 040 UNCLASSIFIED

TITLE--CHANGES IN THE DEFORMATION OF SEALS DURING AGING -U- PROCESSING DATE--30OCT70

AUTHOR--YEKEL, YE.S.

COUNTRY OF INFO--USSR

SOURCE--KAUCH. REZINA, 1970, 29(2), 34-6

DATE PUBLISHED--------70

SUBJECT AREAS--MATERIALS

TOPIC TAGS--ELASTIC SEALER, MATERIAL DEFORMATION, THERMAL AGING, STRESS RELAXATION, PULSE COMPRESSION

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1997/0464 STEP NO--UR/0138/70/029/002/0034/0036

CIRC ACCESSION NO--AP0119400

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

2/2 040 UNCLASSIFIED PROCESSING DATE--30OCT70

CIRC ACCESSION NO--AP0119400

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. AN EMPIRICAL EQUATION IS PROPOSED DESCRIBING THE DEFORMATION OF RUBBER SAMPLES DURING AGING IN THE 10-120DEGREES RANGE; Y EQUALS 1 MINUS (1 MINUS Y SUBK) (T-T SUBK)EXP(1 MINUS T-T SUBK) PRIMEALPHA, AND Y EQUALS (H SUB2 MINUS H SUB1)-H SUB2)-(H SUBO MINUS H SUB1)-H SUBO) (WHERE H SUBO AND H SUB1 ARE THE HEIGHTS OF A SAMPLE BEFORE AND AFTER VERTICAL COMPRESSION, H SUB2 IS THE SAMPLE HEIGHT 24 HR AFTER THE COMPRESSION IS REMOVED), Y SUBK IS THE VALUE OF Y AT TIME (T) EQUALS INFINITY, T SUBK IS THE TIME AT WHICH Y IS SIMILAR TO Y SUBK WITH THE REQUIRED EXPTL. ACCURACY, ALPHA IS AN EMPIRICAL COEFF. THE EXPTL. PLOTS OF ALPHA VS. TEMP., Y SUBK VS. TEMP. OR LOG T SUBK VS. 1-TEMP. WERE ALL LINEAR AND COULD BE USED FOR PREDICTION OF THE SERVICEABILITY OF RUBBER SEALS SUBJECTED TO INTERMITTENT COMPRESSION RELAXATION CYCLES. FACILITY: SVERDLOVSK. FILIAL NAUCH.-ISSLED. INST. REZIN. PROM., SVERDLOVSK, USSR.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

1/2 023 UNCLASSIFIED

TITLE--STUDY OF THE LUMINESCENCE OF ROCK SALT IN A SUPERSTRONG ELECTRICAL FIELD WITH AN ELECTRONIC CONTACT -U-

PROCESSING DATE--27NOV70

AUTHOR-(02)-VOROBYEV, G.A., YEKHANIN, S.G.

COUNTRY OF INFO--USSR

SOURCE--LENINGRAD, SOLID STATE PHYSICS; MAY 1970; PP 1487-9

DATE PUBLISHED--------70

SUBJECT AREAS--PHYSICS

TOPIC TAGS--LUMINESCENCE, ROCK SALT, ELECTRIC FIELD, ELECTRON

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3006/1726

STEP NO--UR/0181/70/000/000/1487/1489

CIRC ACCESSION NO--AP0135308

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

2/2 023 UNCLASSIFIED PROCESSING DATE--27NOV70

CIRC ACCESSION NO--AP0135308

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. BY MEANS OF A METHOD OF AN ELECTRONIC CONTACT IT WAS POSSIBLE TO MAKE STUDIES UNDER VERY CONTROLLED CONDITIONS (CONTROLLING, WITHIN WIDE LIMITS, THE NUMBER OF INJECTED ELECTRONS AND DISTINGUISHING BETWEEN THE EFFECTS OF A STRONG FIELD AND A SPACE CHARGE). THE STUDIES SHOWED THAT THE LUMINESCENCE IS CAUSED BY THE CURRENT OF ELECTRONS FLOWING THROUGH THE LAYER. THE BRIGHTNESS CURRENT RELATION HAS A LINEAR CHARACTER. THE DEPENDENCE OF THE BRIGHTNESS OF THE LUMINESCENCE ON THE VOLTAGE OF A FIELD WITH AN ELECTRONIC CONTACT IS WEAKER THAN IN THE CASE OF ELECTROLYTIC ELECTRODES. THIS CAN BE EXPLAINED BY THE FACT THAT THE NUMBER OF ELECTRONS ENTERING A LAYER WITH THE ELECTRONIC CONTACT, IN CONTRAST WITH THE CASE OF ELECTROLYTIC ELECTRODES, DEPENDS PRACTICALLY NOT AT ALL ON THE VOLTAGE OF THE FIELD IN THE LAYER, WHILE THE ELECTRON MULTIPLICATION, IN THE FIELDS AND LAYERS USED, IS NEGLIGIBLE. THE AUTHORS EXPRESS THEIR GRATITUDE TO N. G. BASOV FOR HIS VALUABLE ADVICE IN THE WORK. FACILITY: TOMSK INSTITUTE OF RADIO ELECTRONICS AND ELECTRONIC ENGINEERING.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

Electricity and Magnetism

USSR

VOROB'YEV, G. A.; YEKHANIN, S. G.; et al (Tomsk Institute of Radio Electronics and Electronic Engineering)

"Study of the Luminescence of Rock Salt in a Superstrong Electrical Field with an Electronic Contact"

Leningrad, Solid State Physics; May 1970; pp 1487-9

ABSTRACT: By means of a method of an electronic contact it was possible to make studies under very controlled conditions (controlling, within wide limits, the number of injected electrons and distinguishing between the effects of a strong field and a space charge).

The studies showed that the luminescence is caused by the current of electrons flowing through the layer. The brightness-current relation has a linear character. The dependence of the brightness of the luminescence on the voltage of a field with an electronic contact is weaker than in the case of electrolytic electrodes. This can be explained by the fact that the number of electrons entering a layer with the electronic contact, in contrast with the case of electrolytic electrodes, depends practically not at all on the voltage of the field in the layer, while the electron multiplication, in the fields and layers used, is negligible.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

USSR

VOROB'YEV, G. A., YEKHANIN, S. G., Solid State Physics; May 1970, pp 1487-9

The authors express their gratitude to N. G. Basov for his valuable advice in the work. The article includes three figures. There are 7 bibliographic references.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

USSR

UDC 620.17:674.81

YEKIMENKO, N. A., Engineer

"Increasing the Mechanical Properties of Wood Plastics"

Moscow, Vestnik Mashinostroyeniya, No 1, Jan 71, pages 45-46

Abstract: Composition wood plastics consisting of wood shaving synthetic resin binders have not been widely used in constructio their brittleness. Now, reinforcement of these products with gl has lead to the creation of a new class of materials, reinforced plastics, with new properties. With proper selection of binders products have high strength properties and can be used for the m of various complexly-loaded parts operating in corrosive and ab This article discusses a few such products briefly, and presents and a graph of impact toughness, tensile strength and hardness of materials as functions of the weight content and type of binder u

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002203620020-4

USSR UDC: 621.372.822/823

YEKIMENKO, T. M., GAMBURG, Yu. D.

"Structure and Heat Losses in Electrolytically Deposited Copper Current--Carrying Layers of Waveguides"

Sb Nauchn. tr. TsNII svyazi (Collected Scientific Works of the Central Scientific Research Institute of Communications), 1970, vyp. 1, pp 37-43 (from RZh-Radiotekhnika, No 11, Nov 70, Abstract No 11B94)

Translation: The paper presents the results of a study of the effect which conditions of electrolysis have on the microgeometry and microstructure of copper deposits, and on heat losses in waveguides and waveguide devices with an electrolytically deposited current-carrying copper layer. It is found that increased heat losses are due both to the roughness of the layer (sulfate electrolyte), and to its reduced electrical conductivity, and in thin layers to porosity and defects in the crystal lattice as well. Data are given from an investigation into the quality of adhesion of the current-carrying layer to the base. Optimum conditions are found for electrolytic deposition of current-carrying layers. Three illustrations, bibliography of three titles. Resumé.

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USSR

UDC 669.71:620.172.251.226

VOROB'YEV, A. Z, GAVRILOVA, Ye. A, DOTSENKO, A. M., and YEKIMENKOV, L. N.

"On the Form of Fatigue Curves for Some Aluminum Alloys"

Moscow, Zavodskaya Laboratoriya, Volume 7, 1971, pp 832-834

Abstract: Although the initial fatigue process which terminates in the formation of macro cracks is relatively insensitive to the frequency of the applied strain, this is not true of the subsequent stage, the propagation of the cracks to destruction. In addition to frequency, other factors such as periodic overload and long-term exposure to higher temperatures were found to have different effects on the durations of the two stages in the fatigue process. In general, the equations normally used to describe the complete process of fatigue breakdown, e.g., $N(\sigma - \sigma_R)^m$ = constant, describe the process of crack formation fairly accurately, but do not reflect the effect of various factors on the second process.

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USSR

YEKIMENKOV, L. N.

"On the Investigation of the Mechanism of the Process of Fatigue Failure of Aluminum Alloys in Relation to Loading Frequency"

Moscow, Zavodskaya Laboratoriya, No 10, 1970, pp 1261-1262

Abstract: To refine the mechanism of metal fatigue failure, a method is proposed in which the process is analyzed in a two-stage approach: 1) the accumulation of fatigue damage and the formation of fatigue macrocracks, and 2) the progression of these cracks. Color defectoscopy and microscopy are used to check for surface cracks. The D16-T and AVT-1 alloys were studied in bending tests in which cylindrical specimens with a circular notch were spun at speeds of 51.6 and 4.3 cps. The data showed that at moderately high stresses (10^4 - 10^6 cycles) a rise in loading frequency strongly affects specimen longevity. Fatigue cracks in specimens tested at high frequency in the zone of moderately high stresses spread simultaneously in two planes and branch out, i.e., secondary cracks grow from the main crack, embrittling the metal.

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Radar

USSR

UDC: none

YEKIMOV, V. A., MIRONOV, V. M.

"Some Problems of Pattern Recognition in Designing Systems for Representing Radar Information"

Tr. Leningr. in-t aviats. priborostr. (Works of the Leningrad Institute of Aviation Instrument Building), 1971, vyp. 69, pp 196-199 (from RZh-Radiotekhnika, No 6, Jun 71, Abstract No 6G1)

Translation: It is shown how converted radar images can be presented to an operator during training. Criteria for adequacy of conversion are presented. Resumé.

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Converters

USSR

YEKIMOV, ~~V.~~ D.

UDC: 621.396.622

"Noise of Cooled Frequency Converters"

Moscow, Radiotekhnika, No 9, 1972, pp 64-69

Abstract: An analysis is made of noise parameters in cooled frequency converters, and expressions are obtained which yield results closer to experimental values than those of earlier papers. An expression for the noise power in terms of the absolute temperature of the mixer diode, the equivalent noise band, the resistance of the diode p-n junction barrier, and the current through the diode, is the basis for the analysis. For the sake of simplicity, only the case of simple broad-band frequency conversion is considered, and the straight-line portion of the volt-ampere characteristic curve is taken as the operating portion. An expression is obtained for the effective noise temperature at the converter input in terms of the coefficient characterizing the change in nonlinearity of the real diode characteristic compared to the characteristic of the ideal diode for that temperature. Curves of

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USSR

UDC: 621.396.622

YEKIMOV, V. D., Radiotekhnika, No 9, 1972, pp 64-69

the noise temperature are plotted as a function of the coefficient, and a table of noise temperature and coefficient values for improved operation of type D405B silicon diodes is compiled. Details are given of an experimental investigation into the effect of low temperatures on the characteristics and parameters of the converter, and photographs are reproduced of a special device used in those experiments. It is concluded that the parameters of the cooled converter improve with reductions in the temperature and in the coefficient defined above. Appreciation is expressed for the assistance of D. N. Nasledov, V. N. Alfeyev, V. V. Galavanov, N. D. Dmitriyev, and L. N. Radaykina.

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USSR

YEKIMOV, VLADIMIR DMITRIYEVICH (Candidate Of Technical Sciences)

"Low Temperatures In Radio Electronics"

Nizkiye temperatury v radioelektronike (of English above), Radioelectronics And Communication Series 5/1972, Izd. "Znaniye," 1972. 32 pp, ill. 8 ref. 6 kop.

Abstract: In the present brochure written in accordance with materials from native and foreign publications, the use of low temperatures and superconductivity in radio electronics is narrated in a popular manner. The properties and behavior of technical materials and radio components at low temperatures are described, and the parameters of cooled semiconductor diodes, transistors, mixers, and parametric and tunnel amplifiers are presented. Receiving systems and their application are discussed. The principles of operation of quantum paramagnetic amplifiers and the basic properties of superconductors are explained. The range of applications of superconductors in radio engineering, computing techniques, and electrical technology are considered. The brochure is intended for a wide circle of readers.

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USSR

YEKIMOV, VLADIMIR DMITRIYEVICH, Nizkiye temperatury v radioelektronike, Radio-electronics And Communication Series 5/1972, Izd. "Znaniye," 1972. 32 pp, ill. 8 ref. 6 kop.

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USSR

UDC: 621.376:621.52

YEKIMOV, V. D.

"Conversion Losses in Cooled Mixers"

V sb. Poluprovodn. pribory v tekhn. elektrosvyazi (Semiconductor Devices in Technical Electrical Communications--collection of works), Moscow, "Svyaz'", 1970, pp 198-210 (from RZh-Radiotekhnika, No 1, Jan 71, Abstract No 1D506)

Translation: The author analyzes conversion losses in a cooled semiconductor mixer for the SHF range. An analytical expression is derived which defines conversion losses as a function of the cooling temperature of the mixer, semiconductor diode parameters and heterodyne voltage amplitude. The results of an experimental study of the parameters of cooled mixer diodes and mixers are presented. Ten illustrations, two tables, bibliography of ten titles.

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USSR UDC: 621.396.69:621.319.4

DUKMASOV, V. B., YEKIMOV, V. V., KUZ'MIN, G. M., PUGOVKIN, P. R.

"An Electromagnetic Powder Clutch as a Braking Element in Capacitor Winding Lathes"

Elektron. tekhnika. Nauchno-tekhn. sb. tekhnol. i organiz. proiz-va (Electronic Technology. Scientific and Technical Collection. Technology and Organization of Production), 1970, vyp. 4 (36), pp 54-60 (from RZh-Radiotekhnika, No 12, Dec 70, Abstract No 12V364)

Translation: The authors discuss solution of the problem of maintaining constant tension on ribbons when winding sections of radio capacitors by using an electromechanical braking element -- a powder electromagnetic clutch of original design. A basis is given for selection of this type of braking element. A description is given of the design and materials on testing an experimental model of the clutch. Recommendations are given on its use. Resumé.

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