"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

L 00951-66

ACCESSION NR: AP5019971

of the sponge block obtained by using condensate magnesium. On the whole the difference in the quality of commercial metal amounts to 6-7 units (hardness) in favor of the titanium sponge obtained on the basis of refined magnesium. Therefore, the use of liquid instead of solid magnesium does not appreciably affect the quality of spongy titanium. As the methods of transporting liquid magnesium are improved, the expediency of conversion to the liquid form of this reducing agent will increase. Analysis of the quality of the titanium sponge obtained with the aid of different types of magnesium has confirmed that the impurities (Fe, Si, C, N, O) from the magnesium concentrate chiefly at the bottom of the sponge block. This leads to a deterioration in the quality of the commercial metal which, in its turn, causes a decrease in its recovery from $TiCl_4$. The deterioration in the quality of spongy titanium is chiefly due to the gaseous impurities. With respect to the content of these impurities, raw and refined magnesium are of a much better quality than condensate magnesium. Owing, however, to the still current imperfections in the technology of removal of magnesium from electrolytic cells, the use of raw magnesium often leads to a lower quality of the bottom and surface layers of blocks of spongy titanium. These operations must be improved before the quality and recovery of titanium metal can be im-

Card 2/3

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ACCESSION NR: AP5019971

proved. Thus, the reduction of titanium from its tetrachloride is best accomplished with the aid of raw magnesium, but this requires prior improvements in the technology and equipment for transferring magnesium from electrolyzers to reduction. Orig. art. has: 1 figure, 3 tables.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: MM

NO REF SOV: 000 OTHER: 000

Card 3/3

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

L 7998-66 EWT(m)/EPA(s)-2/EPF(n)-2/EWP(t)/EWP(b) IJP(c) JD/WW/JG

ACC NR: AP5026531 SOURCE CODE: UR/0286/65/000/019/0071/0071

AUTHORS: Zuyev, N. M.; Tsenter, Ya. A.; Vaynshteyn, G. M.; Vlasov, V. A.; Ustinov, V. S.; Kiselev, O. G.; Maslennikov, I. P.; Feofanov, L. P.; Sharunova, G. M.; Vukolov, V. V.; Ivanov, A. B.

ORG: none

TITLE: A mixer furnace for remelting the condensate from titanium production. Class 40, No. 175229 [announced by All-Union Scientific Research and Design Institute of Aluminum, Magnesium, and Electrode Industry and by Dnieper Titano-Magnesium Plant (Vsesoyuznyy nauchno-issledovatel'skiy i proyektnyy institut alyuminiyevoy, magniyevoy i elektrodnoy promyshlennosti i Dneprovskiy titano-magniyevyy zavod)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 19, 1965, 71

TOPIC TAGS: physical metallurgy, metallurgic furnace, metallurgic industry, titanium

ABSTRACT: This Author Certificate introduces a mixer furnace for remelting the condensate from titanium production. The furnace consists of a melting chamber connected by a duct in its lower part to a mixer forehearth, and of electrodes for melting an inert salt (see Fig. 1). To simplify the process and to reduce the losses of magnesium and magnesium chloride, the mixer is provided with a suspended metallic cap for collecting liquid magnesium and for protecting it from reacting with gases and the lining. A liquid seal secures excess pressure of inert gas (argon) over the melt

Card 1/2

UDC: 669.721.411:621.745.35

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L 7998-66

ACC NR: AP5026531

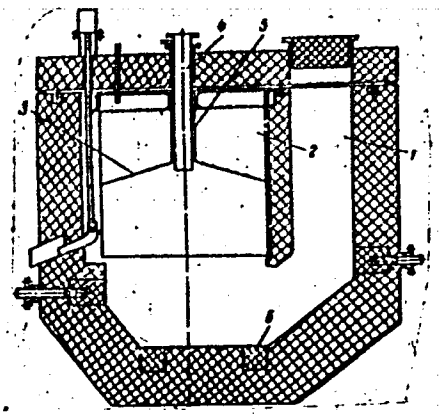

Fig. 1. 1- melting chamber; 2- mixer forehearth; 3- suspended metallic cap; 4- pipe for drawing off magnesium; 5- liquid seal; 6- auxiliary electrodes

during discharging of the charge and removing the molten products. The bottom of the bath is provided with auxiliary electrodes for preventing the formation of crust. Orig. art. has: 1 figure.

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Card 2/2

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

ALESHIN, Aleksey Filippovich; PODKOVYROV, Mikhail Ivanovich; RUZIN, Sergey Ivanovich; USTINOV, Veniamin TSezifovich; FAKEYEV, A.D., red.; KIMMEL', L.S., red.izd-va; GRECHISHCHEVA, V.I., tekhn.red.

[Organization of the repair of lumbering equipment by the unit method] Organizatsiia remonta lesozagotovitel'nogo oborudovaniia agregatnym metodom. Moskva, Goslesbumizdat, 1961. 218 p. (MIRA 15:2)

(Lumbering--Equipment and supplies)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

USTINOV, V.T., inzh.

Automation of hydrogen generators. Masl.-zhir.prom. 27 no.5:41 My '61. (MIRA 14:5)

1. Krasnodarskiy maslozhirovoy kombinat.
(Hydrogen)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

USTINOV, V.T., inzh.; KARABANOV, N.G.

Valve with a two-side action. Masl.-zhir.prom. 28 no.8:36 Ag '62. (MIRA 17:2)

1. Krasnodarskiy maslozhirovoy kombinat imeni V.V.Kuybysheva.

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

621.396.611.4 : 621.365.5

299. High-frequency installation with a cavity resonator. V. V. Ustinov and M. G. Kirian. *Elektrichestvo*, No. 7, 85-7 (July, 1950) In Russian.

A 5 kW h.f. generator for industrial heating purposes is described, particularly suitable for low-loss material application and designed for pre-heating powder for the thermoplastic pressings. By employing a high-Q cavity resonator, good efficiency is obtainable up to 60 Mc/s operational frequency.

A. LANDMAN

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

USSR/Electronics - Generators, HF Induction Heating — Jul 50

"UDN-1 High-Frequency Generator With a Tubular-Type Oscillatory Circuit," V. V. Ustinov, M. G. Kogan, Engineers, Moscow

"Elektrichestvo" No 7, pp 65-67

Describes experimental use of generator with tubular-type oscillatory circuit for industrial heating of dielectrics with low loss factor. Machine was used for preliminary preheating of pressed powders when making products from thermoreactive plastic

FDD — 164T28

USSR/Electronics - Generators, HF (Contd) — Jul 50

materials. Circuit permits operation at 60 mc with comparatively high generator efficiency. Includes diagram and photograph of UDN-1 generator.

FDD — 164T28

PA 164T28

USTINOV, V. V., Eng.

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

USTINOV, V.V.

PHASE I BOOK EXPLOITATION SOV/3901

Novoye v elektricheskoy i ul'trazvukovoy obrabotke materialov (New Developments in Electrical and Ultrasonic Machining of Materials) [Leningrad], Lenizdat, 1959. 281 p. 5,000 copies printed.

Ed. (title page): L.Ya. Popilov; Ed. (inside book): S.I. Borshchevskaya; Tech. Ed.: P.S. Smirnov.

PURPOSE: This book is intended for technical personnel and production workers.

COVERAGE: This is a collection of 20 articles presented at the Third All-Union Conference of the Scientific and Technical Society of the Machine Industry on Electrical and Ultrasonic Machining of Metals, held in Leningrad. The articles deal with the latest achievements in the field of electrical and ultrasonic machining of metals. New methods of machining presently being developed are described. References follow several of the articles.

Livshits, A.L., S.S. Podlazov, A.T. Kravets, and A.I. Aronov. Some Problems in the Technology and Design of Machines for Electroerosion Machining of Metals 67

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AVAILABLE: Library of Congress (TJ 1191 .P 63)

VK/pw/jb
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APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

KRAVCHENKO, V.S., doktor tekhn.nauk; OBRAZTSOV, A.P., kand.tekhn.nauk; USTINOV, V.V., inzh.

Dust-free rock breaking by electric methods. Gor.zhur. no.9: 42-45 S '60. (MIRA 13:9)

1. Institut gornogo dela AN SSSR, Lyubertsy, Moskovskoy oblasti.
(Ore dressing) (Electric cutting machinery)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

USTINOV, V.V.

Temperature and voltage fields in the failure of materials by thermal breakdown. Inzh.-fiz. zhur. 5 no.10:40-46 O '62. (MIRA 15:12)
(Thermal stresses) (Strength of materials)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

ACC NR: AP6[illegible] (N) SOURCE CODE: UR/0413/66/000/011/0075/0075

INVENTOR: Ustinov, V. V.; Grigor'yeva, N. M.; Grishin, A. A.; Belov, L. V.; Brusilovskiy, A. A.; Sinalayev, O. P.

ORG: None

TITLE: A method for measuring the thickness and rate of application of films. Class 42, No. 182339

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 11, 1966, 75

TOPIC TAGS: surface film, resonator, quality control, industrial automation

ABSTRACT: This Author's Certificate introduces a method for using two piezoelectric resonators to measure the thickness and rate of deposition of a film on a base. The procedure is designed for a wide range of thicknesses and for obtaining information in a discrete form which is convenient for automation of the process. The monitored portion of the flow of material being applied to produce the film is switched from one resonator to the other and back again after the required thickness has been reached in the given section. Film thickness is determined from the number of reversals while the rate of application is determined from the reversal frequency.

SUB CODE: 11, 13/ SUBM DATE: 03Apr65

Card 1/1

UDC: 531.7;621.9.08;531.717.1;531.767

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

USTINOV, V. YA

3(5) PHASE I BOOK EXPLOITATION SOV/2403

RSFSR. Glavnoye upravleniye geologii i okhrany nedr. Ural'skoye geologicheskoye upravleniye.

Materialy po geologii i poleznym iskopayemym Urala, vyp. 6 (Materials on the Geology and Mineral Deposits of the Urals, Nr.6) Moscow, Gosgeoltekhizdat, 1958. 150 p. Errata slip inserted. 3,000 copies printed.

Sponsoring Agency: Ministerstvo geologii i okhrany nedr SSSR.

Ed.: P. I. Aladinskiy; Deputy Ed.: K. V. Mokrushin; Ed. of Publishing House: G. F. Nemanova; Tech. Ed.: O. A. Gurova; Editorial Board: V. V. Belov, N. A. Karzhavin, K. Ye. Kozhevnikov, A. A. Korol'kov, P. V. Nechayev, M. A. Poyarkov, I. D. Sobolev, and B. F. Tarkhaneyev.

PURPOSE: This book is intended for geologists and economists interested in the mineral resources of the Urals.

COVERAGE: This collection of articles treats aspects of the physical geology and mineralogy of the Urals. Individual papers discuss: bauxite deposits, oolitic iron ore deposits, the Tobol'sk titanium and zirconium deposits, and problems in structural geology. No personalities are mentioned. References accompany each article.

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APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

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Knyazeva, L. N. Results of Studying the Bauxite Deposits of the Northern Urals and Further Trends in Exploration Work 81

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APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

Materials on the Geology and Mineral Deposits (Cont.) SOV/2403

Sharova, A. K., and A. K. Gladkovskiy. The Problem of Correlating Limestones and Its Significance in Exploration and Prospecting of Devonian Bauxites in the Urals 103

Umova, L. A. Petrographic Characteristics of the Oolitic Iron Ores of the Mugay River Basin in Central Zaural'ye 111

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Shabalina, N. S. Hydrogeological Conditions of Manganese Ore Deposits in the Northern Urals 134

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AVAILABLE: Library of Congress

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APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

USTINOV, V.Ya.

New data on the stratigraphy of lower Paleozoic formations in the western slope of the Polar Urals (Kara, Greater Usa, and Greater Pay-Pudyna Valleys). Mat.po geol.i pol.iskop.Urala no.6: 71-80 '58. (MIRA 12:10)
(Ural Mountains--Geology, Stratigraphic)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

USTINOV, V.Ya.

"Method for geological mapping of metamorphic complexes." Reviewed by V.IA.Ustinov. Razved. i okh.nedr 24 no.10:57-58 O '58. (MIRA 12:2)

1. Ural'skoye geolupravleniye.
(Rocks, Crystalline and metamorphic--Maps)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

USTINOV, V. Ya., Cand Geol-Min Sci -- (diss) "Stratigraphy of the Lower Paleozoic of the western slope of the Polyarniy Urals (basins of the Kary, Great Usy, Great Paypudyny and the Sobi Rivers)." Sverdlovsk, 1960. 13 pp; (Ministry of Higher and Secondary Specialist Education RSFSR, Sverdlovsk Mining Inst im V. V. Vakhrushev); 150 copies; price not given; (KL, 22-60, 133)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

USTINOV, V.Ya.

Sulfur pyrite mineralization in the Arctic Ural Mountains. Biul. nauch.-tekh. inform. VIMS no.2:13-15 '63. (MIRA 18:2)

1. Ural'skoye geologicheskoye upravleniye.

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

USTINOV, Ye., inzh.-podpolkovnik

In anticipation of the spring-summer use of armored equipment.
Voen.vest. 39 no.4:69-73 Ap '59. (MIRA 12:7)
(Tanks (Military science))

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

USTINOVA, Ye.I. (Moskva)

Lidiia Petrovna Breslavets. Bot. zhur. 48 no.7:1070-1071 Jl '63. (MIRA 16:9)

(Breslavets, Lidiia Petrovna, 1882)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

USTINOV, Ye.P.

Using a gamma survey performed on foot for geological mapping. (MIRA 16:3)
Sbor. st. MGiON no.1:5-18 '62.
(Radioactive prospecting) (Geology--Maps)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

USTINOV, Ye.P.

Using an emission survey to solve some problems in detailed geological mapping. Sbor. st. MGiON no.1:22-26 '62. (MIRA 16:3)
(Radioactive prospecting)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

USTINOV, Ye.P.

Using the results of an aerogamma survey in geological mapping. Sbor. st. MGiON no.1:33-38 '62. (MIRA 16:3)
(Radioactive prospecting) (Geology--Maps)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

DANILIN, Ye.L.; USTINOV, Ye.P.

Using radiometric methods in prospecting for deposits of nonradioactive elements. Sbor. st. MGiON no.1:77-92 '62. (MIRA 16:3)
(Radioactive prospecting)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

KUROCHKINA, Z.V.; SEMENOVA, A.I.; DOBROVOL'SKAYA, Ye.A.; USTINOV, Ye.Ye.

Food poisoning caused by a Salmonella typhimurium (Breslau) group. Zhur. mikrobiol. epid. i immun. 29 no.11:71-73 N '58. (MIRA 12:1)
(SALMONELLA INFECTIONS, in inf. & child, typhimurium food pois. (Rus))

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

USTINOV, Yu., kapitan

The primary organization is at the center of attention. Komm. Vooruzh.Sil 3 no.23:62-64 D '62. (MIRA 16:2)
(Communist Youth League)
(Russia--Armed forces--Political activity)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

USTINOV, Yu., kapitan

Useful initiative. Komm. Vooruzh. Sil 4 no.22:59-60 N '63. (MIRA 17:1)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

USTINOV, Yu., master-radiokonstruktor

A simple stereophonic recording head. Radio no.9:45 S '62. (MIRA 15:9)

1. Dobrovol'noye obshchestvo sodeystviya armii, aviatsii i flotu. (Magnetic recorders and recording)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

24(6), 14(5) SOV/179-59-4-34/40

AUTHOR: Ustinov, Yu. A. (Rostov-na-Donu)

TITLE: On the Influence of the Free Boundary of the Semi-space on Crack Propagation

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye tekhnicheskikh nauk. Mekhanika i mashinostroyeniye, 1959, Nr 4, pp 181 - 183 (USSR)

ABSTRACT: This paper puts forward some relations which make it possible to judge the limit of applying the results obtained in the paper (Ref 1). The problem of propagation of a round crack in an elastic semi-space was studied in the paper (Ref 1) by means of a nonfiltrable liquid and in the presence of rock pressure. The problem consists in finding Z_z, R_r, θ_θ and R_z (Figure). They must satisfy the homogeneous equations of the elasticity theory, the consistency conditions and the boundary conditions according to formulas (6), (7), and (8). This problem is solved here by the method of successive approximation. On the basis of the 4th approximation and the hypothesis by S. A. Khristianovich on the finiteness of the stress at the cleft edge, the condition, for-

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mula (1o), for the crack radius is indicated without any intermediate calculation. The analysis carried out showed that a subsequent approximation only brings about a change in the coefficients of the terms $1/h^9$ and up, whereas the coefficients of the other terms up to $1/h^8$ remain unchanged. According to formula (1o), formula (11) is obtained for the uniform pressure P along the circle with the radius $R_1 = \alpha R$ ($\alpha < 1$), as well as formula (12) for the radius R of the round horizontal crack. Formula (13) for the single load F, and formula (14) for R for the case where the cracking occurs under the influence of F, are indicated. On the basis of these formulas, the limit of applicability of the formulas for the force and the radius in the paper (Ref 1) can be judged. There are 1 figure, 2 tables and 4 Soviet references.

SUBMITTED: January 28, 1959

Card 2/2

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

report presented at the 1st All-Union Congress of Theoretical and Applied Mechanics, Moscow, 27 Jan - 3 Feb '60.

1. A. A. Abbasov, A. F. Kasimov, Ia. A. Ibrarts (Baku): Supersonic motions of visco-plastic solids and the basis for improving well cementation.
2. A. A. Abbasov, V. M. Makhtiyev, A. A. Mirzajan (Baku): Heat transfer in moving viscous and visco-plastic solids.
3. N. L. Abramjan (Erevan): Torsion of cylindrical shafts.
4. N. L. Abramjan, A. S. Babloian (Erevan): Torsion of circular hollow shafts with longitudinal notches.
5. Y. L. Aleksirov, A. S. Volmir, V. S. Kiselev (Moscow): Buckling and post-buckling behavior of shells under dynamic loading.
6. A. Ia. Aleksandrov (Novosibirsk): Some relations between the solutions of plane and axisymmetrical problems in the theory of elasticity.
7. A. Ia. Aleksandrov (Novosibirsk): Experimental investigation of plane elastic-plastic problems by means of photoelastic films.
8. V. M. Aleksandrov, Th. A. Dotsenko (Rostov-na-Donu): Some contact problems in elasticity.
9. N. A. Aleksandrian, S. Kh. Arutiunian, M. M. Manukian (Erevan): Torsion of prismatic bars under transient creep.
10. S. A. Alekseev (Moscow): Two-dimensional bodies of equal strength.
11. E. A. Almisee (Tallin): Axisymmetrical vibration of an elastic conical shell.
12. S. A. Ambartsumian (Erevan): On the theory of anisotropic shells and plates.
13. S. A. Ambartsumian, L. A. Movsisian (Erevan): Some problems in the theory of anisotropic (non-orthotropic) shells.
14. I. Ia. Amiro (Kiev): Stability analysis of a stiffened cylindrical shell under axial compression.
15. V. V. Andreev, A. N. Kosevich, L. V. Prutzarov (Kharkov): The inelastic deformation and residual stresses in a plane layer of a solid under allotropic transformations.
16. I. G. Arumanovich (Moscow): The stress distribution in a heavy half-space with a circular hole, the edge of which is subject to non-equilibrated forces.
17. M. Arsene, M. Tanovchem (Bucharest): Photoelastic model studies of cracked reinforced concrete beams.
18. N. Kh. Arutiunian (Erevan): The plane contact problem of the theory of creep.
19. Z. V. Aresenev, T. I. Zatsepina, A. A. Trapeznikov (Moscow): Shear strength and limits of reversible strains of solutions and gels of some rubbers.
20. I. N. Bailis (Leningrad): The general solution of the problem of elastic strains in a cylinder of finite length.
21. G. I. Barenblatt (Moscow): The theory of equilibrium cracks under brittle rupture.
22. G. M. Barkhudar (Moscow): Rheological properties of rubber-like polymers.
23. M. F. Barshtein (Moscow): Dynamic design of structures subjected to random effects.
24. N. F. Bashlykov (Moscow): Temperature distribution in container and metal during extrusion.
25. Bui on Fin (Pakistan), Hsu Tsung-Kuan (Tsinghua), O. S. Ibragim (Moscow): On the dynamics of rigid-plastic structures.
26. V. S. Barsanitov (Leningrad): The theory of the limit state of stress in soil mechanics and its applications.
27. A. Ia. Birman, A. S. Volmir (Moscow): The use of electronic digital computers for solving non-linear problems in the theory of plates and shells.
28. V. I. Blank (Kharkov): Stress displacement functions.
29. V. A. Bobin (Dnepropetrovsk): Difference-variational methods of the theory of structures.
30. V. I. Bobko (Kiev): On solving Hertz's contact problem with inelastic fields of plasticity.
31. V. V. Bolotin (Moscow): Method of space transformations in the non-linear theory of plates and shells.
32. V. V. Bolotin (Moscow): The non-linear problems of aero-elasticity at supersonic speeds.
33. V. V. Bolotin (Moscow): Strength and damage under action of random forces.
34. V. V. Bolotin (Moscow): The statistical theory of seismic design of structures.

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

USTINOV, Yu.A.

Deeds and people of the Volunteer Design Office. Elek.i tepl. tiaga 5 no.10:4-5 O '61. (MIRA 14:10)

1. Glavnyy inzh. depo Penza III, rukovoditel' obshchestvennogo konstruktorskogo byuro.
(Design, Industrial)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

ACCESSION NR: AP4018423 [illegible]/0033/0045

AUTHOR: [illegible] Yu. A. [illegible]

TITLE: Calculation of stress [illegible]

[illegible] mash [illegible], no [illegible] 1964, 33-45

TOPIC TAGS: stress analysis, bending stress, nonbending stress, annular ring

ABSTRACT: Stresses in thick rings under the influence of concentrated loads have been considered by M. Z. Narodetskiy, D. V. Vaynberg, Yu. A. Shevlyakov and others. Further developing these investigations, the author proposes a method for solving the stress problem for rings of any thickness. Two separate problems are solved: 1) ring bending under concentrated loads uniformly distributed along the outer surface, and 2) non-bending stresses in the ring. An elastic medium is considered to be filling the inner part of the ring with a system of concentrated loads on the outer surface. Integration by Fourier series and the methods of P. F. Papkovich and others yields

$$\sigma_\varphi^{(1)} = \frac{2}{\pi\varepsilon_1\varepsilon^2}\left[\frac{\pi\varepsilon^2}{[illegible]} - \frac{\pi\varepsilon^2\cos\varepsilon\varphi}{[illegible]}\operatorname{ctg}\frac{\pi}{\pi} - 0.411\,(1 - 0.211\varepsilon^2) - \right.$$

[illegible]

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

ACCESSION NR: AP4018423

for the first problem. For [illegible] the boundary value problem is solved as

$$\Phi = J + \frac{2}{\varepsilon} \sum_{k=1}^{\infty} (-1)^k \exp\left(-\frac{k\pi^2}{\varepsilon}\right) \sin k\pi\beta \operatorname{ch} k\pi\varphi$$

$$J = \frac{1}{2\pi\varepsilon} \int_{-\infty}^{\infty} \frac{\operatorname{sh} \beta x}{\operatorname{sh} x} e^{\varepsilon x} dx = \frac{\sin \pi\beta}{2\varepsilon (\operatorname{ch} \pi\varphi + \cos \pi\beta)}$$

The first equation is valid for $\varphi < 0.4$ and $\varepsilon \leq 0.6$. The second one may be used when $|\varphi| < 2\pi$. Orig. art. has: 4 figures, 1 table and 79 formulas.

ASSOCIATION: none

SUBMITTED: 11Nov63 ENCL: 00

SUB CODE: AS NO REF SOV: 007 OTHER: 002

Card 2/2

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

USTINOV, Yu.A. (Rostov-na-Donu)

Design of tired wheels. Izv. AN SSSR, Mekh. i mashinostr. no.3, 127-132 My-Je '64. (MIRA 17:7)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

VOROVICH, I.I., doktor fiz.-mat. nauk, prof.; USTINOV, Yu.A., assistent; SAFRONOV, Yu.V., kand. fiz.-mat. nauk, dotsent

Determining contact pressure between the tire and the rim.
Izv. vys. ucheb. zav.; mashinostr. no.10:26-37 '64
(MIRA 18:1)

1. Rostovskiy-na-Donu gosudarstvennyy universitet.

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

VOROVICH, I.I., doktor fiz.-matem.nauk, prof.; SAFRONOV, Yu.V., kand.fiz.-matem.nauk, dotsent; USTINOV, Yu.A.

Axial slipping of tires on large-diameter spiral gear wheels. Vest.mashinostr. 44 no.12:13-17 D '64. (MIRA 18:2)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

AUTHOR: Ustinov, Yu. A.

which for small ε, $0 < \varepsilon \leq 1.0$, can be expanded in ε to yield

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

L 52546-65

ACCESSION NR: AP5010[illegible]

[illegible] ...nature of [illegible]

$$\sigma_\beta = \sigma_\alpha + 2\,\mathrm{ch}\,\varepsilon\,\frac{\mathrm{sh}\,2\varepsilon}{\mathrm{sh}\,2\varepsilon + 2\varepsilon}$$ [illegible]

[illegible]

SUBMITTED: 30Jan64

NO REF SOV: 006

OTHER: 003

Card [illegible]

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

Fig. 1.

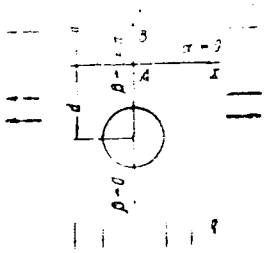

Fig. 2.

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

VOROVICH, I.I., doktor fiz.-matem. nauk, prof.; LYUBIMOV, V.Ya.; SAFRONOV, Yu.V., kand. fiz.-matem. nauk, dotsent; SOFRONOV, Ye.I., kand. tekhn. nauk; USTINOV, Yu.A., kand. fiz.-matem. nauk

Reliability of fitting rim bands on gear-wheel centers. Vest. mashinostr. 45 no.7:23-26 Jl '65. (MIRA 18:10)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

ACCESSION NR: AP4020587 S/0057/64/034/003/0546/0557

AUTHOR: Ageyev, V.N.; Ionov, N.I.; Ustinov, Yu.K.

TITLE: Application of a pulse mass spectrometer to investigation of adsorption characteristics by the flash method

SOURCE: Zhurnal tekhnichekoy fiziki, v.34, no.3, 1964, 546-557

TOPIC TAGS: pulse mass spectrometer, pulse mass spectrometer manometer, flash desorption curve, carbon monoxide desorption, carbon dinoxide desorption, water desorption, hydrogen desorption, oxygen desorption

ABSTRACT: The pulse mass spectrometer described by Ye.I.Agishev and N.I.Ionov (Zh TF,28,1775,1958) was employed as the partial pressure gage in an investigation of adsorption characteristics by the flash desorption method proposed by J.A.Becker and C.D.Hartman (J.Phys.Chem.57,157,1953) and further developed by G.Ehrlich (J. Chem.Phys.34,29,1961) and others. The theory of the flash method is developed briefly and the principal equations are derived. A 0.025 mm diameter 120 mm long tungsten wire served as the adsorber. This was mounted near the ion source at one end of the 2 liter mass spectrometer chamber. During the heating of the wire (duration

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

ACCESSION NR: AP4020587

about 0.1 sec) the accelerating potential was applied in 50 microsec pulses at regular intervals. The ions automatically sorted themselves into mass groups during their drift to the ion detector (a secondary electron multiplier) at the far end of the spectrometer chamber. A four grid ion gate was located directly in front of the detector and was so pulses as to permit only ions of a selected mass to be recorded. The amplified ion current, after being smoothed by an integrating circuit with an appropriate time constant, was displayed on an oscilloscope. The temperature of the tungsten adsorber, obtained from the unbalance voltage of a bridge in the heating circuit, was also displayed on the same oscilloscope. Thus, flash heating and desorption curves for a selected molecule were simultaneously automatically recorded. Flash desorption curves were obtained for CO, H_2O, H_2, O_2 and CO_2 after adsorption had been permitted to proceed for times varying from 0.25 to 30 min. The residual gas pressure during these measurements was about 8×10^{-8} torr. The authors consider this the most serious inadequacy of the present apparatus, and they are taking steps to reduce this pressure. All the desorption curves except those for hydrogen were complex. In the case of CO, three phases were distinguished, which are tentatively identified as the α, β_2 and β_3 phases of Ehrlich (loc.cit.supra). Ehrlich's phase β_1 was not found. The activation energy for desorption of CO from phases β_2

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

ACC.NR: AP4020587

and β_3 was deduced from the desorption curves. It was found that desorption from β_2 is a first order reaction with activation energy 1.6 eV and desorption from β_3 is a second order reaction with activation energy 2.4 eV. The rather large discrepancy between those activation energies and those found by other investigators is ascribed to inaccurate temperature measurement by the other workers. An increasing final CO pressure observed at high temperatures is ascribed, as it has been by others, to oxidation of carbon diffusing from within the tungsten. The reaction was found to be with H_2O and not with CO_2. "The authors are grateful to Ye.I.Agishev for advice and assistance during development of the apparatus." Orig.art.has: 13 formulas and 10 figures.

ASSOCIATION: Fiziko-tekhnicheskiy institut im. A.F.Ioffe AN SSSR, Leningrad (Physical-Technical Institute, AN SSSR)

SUBMITTED: 06Feb63 DATE ACQ: 31Mar64 ENCL: 00

SUB CODE: PH NR REF SOV: 006 OTHER: 009

Card 3/3

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

L 19019-65 EWT(m)/EPF(c)/T/EWP(t)/EWP(b) Pr-4/Pb-4D(f)ASD(f)-2/SSD/AFWL/
IJP(c) JD/JG

ACCESSION NR: AP4049049 S/0057/64/034/011/2056/2066

AUTHOR: Ageyev, V.N.; Ionov, N.I.; Ustinov, Yu.K.

TITLE: Investigation of chemisorption of hydrogen on polycrystalline tungsten by the flash method with a pulsed mass spectrometer 27

SOURCE: Zhurnal tekhnicheskoy fiziki, v.34, no.11, 1964, 2056-2066

TOPIC TAGS: chemisorption, hydrogen, carbon monoxide, tungsten

ABSTRACT: An investigation of the adsorption of hydrogen on a tungsten surface was undertaken because of the large discrepancies among the results of other investigators. The flash method was employed, and the partial pressures of the desorbed gases were measured with a pulsed mass spectrometer, as described previously by the authors (ZhTF 34, 546, 1964). A number of improvements were made in the apparatus. Vacua of the order of 10^{-9} torr were attained, and with the system closed and the pumps off, the pressure remained below 10^{-7} torr for as long as a week. The adsorber was a 12 cm long, 2[illegible] micron diameter polycrystalline tungsten wire. It was flashed with direct current, and its resistance (and hence temperature) was measured with high-frequency alternating current. Flash curves of pressure and resistance

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ACCESSION NR: AP4049049

versus time were simultaneously displayed on an oscilloscope. In all the experiments the desorption was complete at a temperature below 1000°K; thus, no appreciable quantity of atomic hydrogen was involved. The desorption curves were complex and indicated the presence of two adsorbed phases, both of which were desorbed by second order reactions. The rate constants and activation energies for the two phases were found to be 1.4 x 10[illegible] cm²/sec and [illegible] and [illegible] cm² sec [illegible] eV, respectively. These phases were not the same as those reported by J.Eisinger (J.Chem.Phys.29,5,1958), and it is suggested that his results were due to displacement of adsorbed hydrogen by carbon monoxide, an effect that was observed and measured in the present work. It is concluded that the two phases are due to two different types of adsorption centers distributed over the surface of the metal. Arguments are presented to support this view, and potential energy curves are given for adsorption in the two different phases. "The authors thank B.A.Mamyrin for assistance in developing the electronics for the experimental apparatus." Orig.art.has: 8 formulas and 11 figures.

2/3

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

L 19019-65

ACCESSION NR: AP4049049

ASSOCIATION: Fiziko-tekhnicheskiy institut im.A.F.Ioffe AN SSSR, Leningrad (Physicotechnical Institute, AN SSSR)

SUBMITTED: 20Mar64

ENCL: 00

SUB CODE: GC

NR REF SOV: 006

OTHER: 014

3/3

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

AUTHOR: [illegible]

TITLE: Investigation [illegible] monoxide on polycrystalline tungsten wires by the [illegible]

SOURCE: Zhurnal tekhnicheskoy fiziki, v.35, no.6, 1965, 1106-1114

TOPIC TAGS: chemisorption, adsorption, carbon monoxide, tungsten, activation energy

[illegible] previous work of the [illegible]

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and all were heated at 2400°K for

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ACCESSION NR. AP[illegible]

1.50 and 3.87 eV were found, [illegible] G.Ehrlich and J.Hudda (J.Chem.Phys.[illegible] β_1 and β_2, respectively, of [illegible] but not found. The authors'

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

sulting in [illegible] surface is discussed [illegible]
distributed on the surface is discussed [illegible]
has 1 formula and 6 figures.

[illegible] 3/3

ACCESSION NR: [illegible]

ASSOCIATION: Fiziko-tekhnicheskiy institut im. A. F. Ioffe AN SSSR, Leningrad (Physico-technical [illegible])

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

Card 3/3

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

USTINOV, Yu. M. Cand Tech Sci -- (diss) "On the problem of interference-proof radio reception of amplitude-modulated ~~fluctuations~~ oscillations." Len, 1958. 13 pp with ~~charts~~ diagrams (Min of Maritime Fleet USSR. Len Higher Engineering Nautical School im Admiral S. O. Makarov). (KL, 36-58, 113)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

Ustinov, Yu.T.

SUKHOPAROV, Aleksandr Aleksandrovich; USTINOV, Yuriy Timofeyevich; KONDRATENKO, N.G., inzh., retsenzent; PARFENT'YEV, G.A., inzh., retsenzent; MERKULOV, Ye.F., inzh., red.; VASIL'YEVA, V.P., red. izd-va; SPERANSKAYA, O.V., tekhn. red.

[Assembling industrial equipment] Montazh promyshlennogo oborudovaniia. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1958. 316 p. (MIRA 11:7)
(Machinery—Erecting work)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

MIKHAYLOV, Bor.; USTINOV, Z., red.; DUBSON, Ya., tekhn.red.

[Radio] Radioocherk. Moskva, Gos.komitet po radioveshchaniiu i televideniiu, 1958. 79 p. (MIRA 12:3)
(Radio)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

USTINOVA, A.D.

USSR / General Topics. Methodology, History, Scientific Institutions and Conferences, Instruction, Bibliography and Scientific Documentation. A-1

Abs Jour : Ref Zhur - Khimiya, No 5, 1958, No 13420

Author : A.D. Ustinova

Inst : -

Title : Moscow Yeast Factory

Orig Pub : Khlebopek. i konditersk. prom-st', 1957, No 10, 23 - 25

Abstract : Abridged description of development and work in the period of 40 years.

Card : 1/1

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

PLEVAKO, Yekaterina Arkad'yevna; BAKUSHINSKAYA, Ol'ga Anatol'yevna; MALCHENKO, A.L., prof., retsenzent; USTINOVA, A.D., inzh., retsenzent; MONOZOVA, I.A., red.

[Microbiological and chemical technological control of yeast production] Mikrobiologicheskii i khimiko-tekhnologicheskii kontrol' drozhzhevogo proizvodstva. Moskva, Pishchevaia promyshlennost', 1964. 269 p. (MIRA 18:2)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

FINKEL', M.Ya.; prinimali uchastiye: SHEVCHENKO, A.I.; KAUFMAN, A.S., [deceased]; STEPANENKO, V.S.; FEDOROV, N.I.; PAVLOVA, N.F.; AYZENBERG, L.G.; FAYNGOL'D, S.G.; LITVINOVA, K.I.; VASLYAYEV, G.P.; STETSENKO, Ye.Ya.; LITVINOVA, O.Yu.; USTINOVA, A.G.

Improvement of the saturation process in the production of ammonium sulfate. Koks i khim. no.7:43-46 '60. (MIRA 13:7)

1. Ukrainskiy uglekhimicheskiy institut (for Finkel').
2. Yasinovskiy koksokhimicheskiy zavod (for Vaslyayev).
3. Giprokoks (for Ustinova).
(Ammonium sulfate)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

TSVETAYEV, A.A., otv. red.;KADIL'NIKOV, I.P., red.; USTINOVA, A.G., red.

[Regional study; materials of the Sixth All-Urals Conference on the Geography and Conservation of Nature] Kraevedenie; materialy Vseural'skogo soveshchaniia po voprosam geografii i okhrany prirody. Ufa, Bashkirskii gos. univ. im. 40-letiia Oktiabria, 1961. 51 p. (MIRA 17:5)

1. Vseural'skoye soveshchaniye po voprosam geografii i okhrany prirody. 6th.

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

24 (5), 21 (1)

AUTHOR: Ustinova, A. K. SOV/56-37-1-51/64

TITLE: Angular Correlation in Internal Conversion in Consideration of Screening and of the Finite Dimensions of the Nucleus (Uglovaya korrelyatsiya pri vnutrenney konversii s uchetom ekranirovaniya i konechnykh razmerov yadra)

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959, Vol 37, Nr 1, pp 307 - 308 (USSR)

ABSTRACT: The author of the present "Letter to the Editor" compares several results obtained by Rose et al. (Ref 1) and Dolginov (Ref 2) as well as by other authors with respect to the angular correlation of a conversion electron with some of her own results, which were obtained by taking the screening of the nuclear field and the finite nuclear dimensions (as in reference 4) into account. According to Rose, the angular correlation of a conversion electron with arbitrary subsequent emission x is given by $W_{e-x}(\vartheta) = \sum_{\nu=0}^{\nu_m} b_\nu A_\nu(\gamma-x) P_\nu(\cos\vartheta)$, where b_ν denotes the coefficients of angular correlation. From b_2 it is possible to obtain

Card 1/2

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

Angular Correlation in Internal Conversion in Consideration of Screening and of the Finite Dimensions of the Nucleus

SOV/56-37-1-51/64

all coefficients b_ν ($\nu > 2$) according to the formula $b_\nu(\pi)-1 = \frac{\nu(\nu+1)[L(L+1)-3]}{3[2L(L+1)-\nu(\nu+1)]}[b_2(\pi)-1]$, where π = e or m (L = 1...5, multipolarity). Rose published a diagram of the curves $b_2(\pi)$ for 12 elements, $10 < Z < 96$ on the assumption of a point nucleus with Coulomb field. The author calculated the $b_2(\pi)$-curve for Z = 81, 84, 88 and 92, and compared the results obtained with those obtained by Rose for the values Z = 88 and 92. It was found that the curves obtained by the author are shifted towards lower Z-values compared to those of Rose. The maximum shift is 1% (cf Figs 1,2). The author finally thanks A. Z. Dolginov and L. A. Sliv for valuable advice. There are 2 figures and 4 references, 3 of which are Soviet.

SUBMITTED: March 12, 1959

Card 2/2

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

OMEL'CHENKO, S.I.; PRIZ, M.N.; SINITSA, V.I.; SHAMRAYEV, G.M.; USTINOVA, A.M.; PANCHENKO, N.A.; ZHADAN, N.S.

Production of polyglycol maleate resins modified with cyclopentadiene and their properties. Plast.massy no.12:14-16 '63. (MIRA 17:2)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

RAYTSIS, A.B. [Raicis, A.] (Riga); USTINOVA, A.O., (Riga)

Rapid determination of sugar in the blood and the cerebrospinal fluid by the toluidine method. Lab. delo. no.1:33-35 '65. (MIRA 18:1)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

USTINOVA, A. P., PETROVA, N. V., SHILOVA, S. A., TKACHENKO, N. N., MOROVINA, A. G., GLADKIKH, S. G. and DIANOVA, V. V.

"The Epidemiology and Prophylaxis of Tick-Borne Encephalitis in Molotovskaya Oblast," an article presented at the Interoblast' Scientific-Practical Conference of Medical Workers of the Urals, Siberia, and the Far East, Krasnoyarsk, 8-12 Dec 55.

Sum. No. 1047, 31 Aug 56

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

USTINOVA, A.P.

GLADKIKH, S.G.; KIPRIYANOVA, N.V.; USTINOVA, A.P. [redacted]

Tick-borne encephalitis in Molotov Province [with summary in English]. Vop.virus. 2 no.3:165-167 My-Je '57. (MIRA 10:10)

1. TSentral'nyy nauchno-issledovatel'skiy dezinfektsionnyy institut Moskva, i Oblastnaya sanitarno-epidemiologicheskaya stantsiiya, Molotov.

(ENCEPHALITIS, EPIDEMIC, epidemiology, in Russia, tick-borne (Rus))

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

USTINOVA, A. P., PETROVA, N. V., TKACHENKO, N. N., KOROVINA, A. G., GLAIKIKH, S. G., SHILOVA, S. A.

"Antitick measures in the nidi of spring-summer encephalitis."

report submitted at the 13th All-Union Congress of Hygienists, Epidemiologists and Infectionists, 1959.

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

J

USSR / Soil Science. Organic Fertilizers.

Abs Jour : Ref Zhur - Biologiya, No 11, 1958, No. 48670

Author : Ustinova, A. V.
Inst : Not given
Title : Legume Crops (Siderates) for Salty Soils

Orig Pub : S.-kh. Povolzh'ya, 1957, No 5, 23-26

Abstract : At the Astrakhan' Agricultural Experimental Station, mustard, trigonella, and clover were tried as a green manure for the improvement of the salty, irrigated soils. In early spring sowing these plants developed well and produced a yield of 25-30 t/ha. of green bulk. A large number of small tubers developed on the roots of clover and trigonella. The care of mustard consisted of irrigation and two applications of DDT powder. The care of the clover and trigonella

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APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

USSR / Soil Science. Organic Fertilizers. J

Abs Jour : Ref Zhur - Biologiya, No 11, 1958, No. 48670

consisted of two waterings - on the sprouts and before tillage. The increased yields of different cultures were observed for several years after plowing in. The greatest effect was produced by trigonella. Spring growing of green manure is recommended for summer potato plantings and for late cultures. The fall growing of green manure, after early vegetable and winter grain cultures is also recommended. -- T. L. Rivkind

Card 2/2

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

USTINOVA, A.V.; ANDREYEVA, N.S.

X-ray diffraction study of the effect of temperature on the structure of polyamide fibers. Vysokom.soed. 2 no.6:958-959 Je '60. (MIRA 13:6)

(Polyamides--Spectra)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

USTINOVA, E. I

USSR/ Biology - Cytology

Card 1/1 Pub. 22 - 36/47

Authors : Ustinova, E. I.

Title : The apospory phenomenon in sunflower

Periodical : Dok. AN SSSR 100/6, 1163-1166, Feb 21, 1955

Abstract : The phenomenon of apospory in plants, especially in the case of sunflowers is explained. Seven references: 1 English and 6 USSR (1908-1953). Drawings.

Institution : The M. V. Lomonosov State University, Moscow

Presented by: Academician A. L. Kursanov, September 16, 1954

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

PAVLOV, A.I., kandidat tekhnicheskikh nauk; USTINOVA, G.A.

[redacted]

Belts made of synthetic materials. Tekst. prom. 16 no.8: 24-26 Ag '56. (MLRA 9:10)

(Belts and belting) (Leather substitutes)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

USTINOVA, G.A., assistent

Change in the function of the skin receptors under the influence of ultraviolet rays in patients with microbial eczema. Trudy LSGMI 52:5-36 '60. (MIRA 14:8)

(ULTRAVIOLET RAYS—PHYSIOLOGICAL EFFECT)
(SKIN—INNERVATION) (ECZEMA) (RECEPTORS (NEUROLOGY))

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

USTINOVA, G.A., assistant

Influence of ultraviolet rays on the function of skin receptors in healthy subjects. Trudy LSGMI 52:37-58 '60. (MIRA 14:8)
(SKIN—INNERVATION) (ULTRAVIOLET RAYS—PHYSIOLOGICAL EFFECT)
(RECEPTORS (NEUROLOGY))

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

USTINOVA, Ye.T.; USTINOVA, G.A.; KOMOVKINA, N.S.

Testing of new bonding substances for the manufa-ture of nonwoven fabrics for various purposes. Nauch.-issl.trudy TSNIIKHBI '60 [publ. '62]:196-208. (MIRA 18:2)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

ROCHEV, N.N., glav. red.; VAVILOV, P.P., red.; VERTEL', E.I., red.; GORELIK, A.I., red.; GUZMAN, I.S., red.; KUZNETSOV, G.N., red.; MEDVEDEV, G.A., red.; MODYANOV, Ya.V., red.; PANTELEYEVA, A.A., red.; POLYAKOV, V.V., red.; POPOV, S.A., red.; POPOVA, S.M., red.; RAYEVSKIY, S.S., red.; RUDAKOV, S.V., red.; SYUTKIN, A.F., red.; USOV, A.I., red.; USTINOVA, I.K., red.; SHKIL', P.T., red.; CHEBYKIN, N.P., red.; MEZENTSEV, S.A., red.; MOROZOV, V.S., red.; OPLESNIN, I.I., tekhn. red.

[Forty years of the Komi A.S.S.R., 1921-1961; studies on the cultural and economic development of the Komi Republic]40 let Komi ASSR, 1921-1961; ocherki o razvitii ekonomiki i kul'tury Komi Respubliki. Syktyvkar, Komi knizhnoe izd-vo, 1961. 154 p. (MIRA 14:11)
(Komi A.S.S.R.—Economic conditions) (Komi A.S.S.R.—Culture)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

U.S.S.R. / Human and Animal Physiology. Liver. T

Abs Jour: Ref Zhur-Biol., No 5, 1958, 22314.

Author : ~~Ustinova, L. A.~~
Inst : Chkalovsk Med. Inst.
Title : The Specificity of the Vernal-Thymol Reaction.

Orig Pub: Tr. Chkalovskogo med. in-ta, 1956 vyp., 5, 191-196.

Abstract: A strongly positive (10 units) pathological veronalthymol test (VTT) occurred only in liver insufficiency. In diffuse liver damage the results of the tests averaged from 8-10 units. In general, toxic states (tuberculosis, typhoid, toxemias of pregnancy) complicated by secondary liver damage, the VTT gave, in 6.9% of cases, moderately positive reactions which was in accord with results of other liver tests.

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

EXCERPTA MEDICA Sec. 6 Vol 13/12 Internal med. Dec 59

6885. TREATMENT OF TYPHOID PATIENTS AND TYPHOID CARRIERS WITH ANTIBIOTICS IN CONJUNCTION WITH CORTISONE (Russian text) - Uetinova L.A. SOV.MED. 1958, 22/12 (90-96) Graphs 3 Tables 2

The patients show less toxaemia and a shorter febrile period than those treated with antibiotics alone. Preliminary results show that the addition of cortisone to the treatment is beneficial in preventing relapses of typhoid fever. However, treatment with cortisone and antibiotics has no effect on carriers of typhoid bacilli.

Anigstein - Galveston, Tex. (L, 6)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

USTINOVA, L. A.

16G66

USSR/Geographic Regional Studies 5108.0100 1947
Topography 6203.0100

"Geography of Sedentary Populated Points of Oyrot Autonomous Oblast," L. A. Ustinova, 30 pp

"Voprosy Geografii" Fifth Symposium

Gives information on historical premises of emergence of populated points in Oyrot Altay, changes in geography of populated points from 1859 to 1897, and of sedentary populated points between 1897 and 1926 censuses. Describes populated points in foothills of Oyrot Altay, of Uymon-Katandin steppe, along Chuyskaya highway and populated points in valley of Katuna River's main course and its tributaries. Also gives change in geography of sedentary populated points after 1926 census. LC

16G66

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

USTINOVA, L. A.

"Geography of the Population of Northern Altay."
Thesis for degree of Cand. Geographical Sci. Sub.
18 May 49, Moscow State Pedagogical Inst Imeni V. I. Lenin

Summary 82, 18 Dec 52, Dissertations Presented for Degrees in Science and Engineering in Moscow in 1949.
From Vechernyaya Moskva, Jan-Dec 1949.

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

GRIGOR'YEV, A.M. [Hrihor'iev, A.M.]; KRIVCHENKO, G.O. [Kryvchenko, H.O.], prof. [deceased]; STAROVOYTENKO, I.P.; USTINOVA, L.A. [Ustynova, L.A.]; CHUNTULOV, V.T.; GOLOVNYAK, L.P. [Holovnyak, L.P.], red.; KHOKHONOVSKAYA, T.I. [Khokhanovs'ka, T.I.], tekhn. red.

[Economic and geographical features of the Ukrainian S.S.R.] Ukrains'ka RSR; ekonomiko-geografichna kharakterystyka. Kyiv, Vyd-vo Kyivs'koho univ., 1961. 208 p. (MIRA 14:10)

(Ukraine—Economic geography)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

PANASHCHENKO, I.P., dots.; CHUNTULOV, V.T., dots.; POGREBINSKIY, A.P., prof.; SPATAR, N.G., dots.; LAUTA, S.P., dots.; USTINOVA, L.A., dots.; KRIVEN', P.V., prof.; FILIPPOV, V.I., dots.; GOLUBEV, V.A., kand. ekon. nauk; DZYUBKO, I.S., dots.; GRIGOR'YEV, A.N., dots.; ZATSEPILIN, V.G., dots.; TERESHCHENKO, V.F.; LOYBERG, M.Ya., kand. ist. nauk; ORLIK, Ye.L., red.; KHOKHANOVSKAYA, T.I., tekhn. red.

[Economic history of foreign countries]Ekonomicheskaia istoriia zarubezhnykh stran; kurs lektsii. Kiev, Izd-vo Kievskogo univ. Pt.2.[From the 1870's to the present time]Ot 70-kh godov XIX v. do nastoiashchego vremeni. 1961. 387 p. (MIRA 15:11)

1. Prepodavateli kafedr politicheskoy ekonomii i istorii narodnogo khozyaystva Kiyevskogo instituta narodnogo khozyaystva (for all except Orlik, Khokhanovskaya).

(Economic history)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

NIKONOV, V.A., dotsent; USTINOVA, L.A., kand.med.nauk; SHIBAYEVA, T.L., assistent

Corticosteroid hormones and ACTH in compound treatment of Botkin's disease (epidemic hepatitis). Trudy KGMI no.10:310-313 '63. (MIRA 18:1)

1. Iz kafedry infektsionnykh bolezney (zav. kafedroy - dotsent V.A.Nikonov) Kalininskogo gosudarstvennogo meditsinskogo instituta.

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

USTINOVA, L. B. and Danilova, N. A.

"Megohmmeter With Negative Feedback"
Tr. Vses. n-i. Radioveshchat, Priyema i Akustiki, No 2, 1954, 56-75

Operation and circuit of equipment for measuring high resistances is described. The basic stage of the apparatus is an electrometric dc amplifier with negative feddback. The instrument is convenient in use and secures approximately 3% accuracy in the range of 10^9 - 19^{13} ohms and 10% in the range of 10^{13} - 10^{14} ohms. (RZhFiz, No 9, 1955)

SO: Sum-No 787, 12 Jan 56

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

USTINOVA, L.B.

112-1-1694

Translation from: Referativnyy Zhurnal, Elektrotekhnika, 1957, Nr 1, p. 254 (USSR)

AUTHOR: Ustinova, L.B.

TITLE: Transients in Electrometer Feedback Amplifiers (Perekhodnyye protsessy v elektrometricheskikh usilitelyakh s obratnoy svyaz'yu)

PERIODICAL: Tr. Vses. n.-i. in-ta radioveshchat. priyema i akust., 1955, Nr 5, pp.43-61

ABSTRACT: Basic types of feedback amplifier setups are presented and electrometer amplifiers are referred to the type of setups with parallel feedback. The inconvenience of setting up differential equations is stated in investigating complicated versions of amplifier configurations which are described by equations of higher than 2-nd order. It is suggested to use for the investigation of amplifier transients the known formula for the amplifier forward gain K in its complex form:

$$\frac{\dot{U}_{outp}}{\dot{U}_{inp}} = \dot{K} = \frac{\dot{K}'}{1+\dot{K}\dot{\beta}} \qquad (1)$$

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

112-1-1694

Transients in Electrometer Feedback Amplifiers (Cont.)

and known from the operational method: relationship between frequency response and transient characteristics

$$\bar{A}(p) = \frac{k(p)}{p}$$

It is demonstrated that calculations according to formula (1) produce the same results as the direct drawing up of a differential equation. On the basis of calculations, a table of amplifier transfer constants is presented as a function of the manner of sending the signal into the circuit. Transient amplifier characteristics are developed. Results of experimental checking of transient characteristics of typical ЭMY-1 and MC-2 electrometer amplifiers are given as obtained from supplying at their input a sequence of periodic square pulses. Oscillograms of the amplifier output voltage in the case of appearance of an oscillatory process are presented. Practical deductions permitting an improvement of amplifier

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

112-1-1694

Transients in Electrometer Feedback Amplifiers (Cont.)

characteristics are made in conclusion: a) to correct the process as it is forming by observing conditions of equality of the time constants of the input and feedback circuits or by applying a special compensating circuit; b) to reduce the kick of the output voltage during the zero adjustment of d-c amplifiers (the kick of the output voltage is conditioned by the reaction of the system to the adjustment which often has a character of differentiation). It is demonstrated that regardless of the fact that in theory natural oscillations cannot take place in the described amplifiers, in practice, they occur with the reduction of resistance in the feedback circuit and with a large amplifier forward gain. This is explained by the fact that in theoretical derivations the transmission factor of the amplifier proper was considered as substantial. Bibliography: 3 titles.

Card 3/3

V.Z.P.

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

USTINOVA, L.B.

Experimental investigation of zero drifts in d.c. amplifiers. Nauch.-tekh.inform.biul.LPI no.5:15-27 '58. (MIRA 12:5)
(Amplifiers, Electron-tube)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

85725

S/108/60/015/006/010/012/XX
B010/B070

6.4400 (2103,3203,3303,2204,1154)

AUTHORS: Ustinova, L. B., Luzyanina, Z. N.

TITLE: Correction of the Frequency Response Curve of Broad-band Amplifiers With the Help of Positive and Negative Feedback

PERIODICAL: Radiotekhnika, 1960, Vol. 15, No. 6, pp. 24-35

TEXT: The present paper supplements the papers of M. M. Ayzinov, I. A. Suslov, and L. B. Ustinova, and indicates the method of calculation of the optimal parameters of a two-stage broad-band amplifier which is frequency-corrected by the use of positive and negative feeback. Frequency correction with the help of inductance is applied for the purpose of comparison. Using the notations of Table 1, the amplification factor of the frequency-corrected circuits of the table is given by

$K = \frac{K_0}{a_0+a_1x+a_2x^2+a_3x^3}$. This factor may be increased in the region of high frequencies in comparison to the medium frequencies by feeding back the frequency-dependent output signal to the input of the amplifier. Denoting

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

85725

Correction of the Frequency Response Curve of Broad-band Amplifiers With the Help of Positive and Negative Feedback

S/108/60/015/006/010/012/XX
B010/B070

the angular frequency of this amplification maximum by ω_2, the ratio of the amplification maximum to the amplification of the medium frequencies is given by equation (8): $m^2 = \frac{A}{A+B\Omega_2+C\Omega_2^2+D\Omega_2^3}$, where A, B, C, D are to be taken from Table 1, and $\Omega_2 = (\omega_2 RC)^2$ [Abstracter's note: Correctly, $\Omega_2 = (\omega_2 RC_1)^2$. Also in Table 1, C should read C_1 at the sign *)]. The quality of a broad-band amplifier is characterized by the product $K(0)f_2$, where K(0) is the amplification factor for medium frequencies, and $f_2 = \omega_2/2\pi$. This product depends principally on the degree of the polynomial in the denominator of the right-hand side of equation (8), and can be calculated from it. The result is (15):

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

85725

Correction of the Frequency Response Curve of Broad-band Amplifiers With the Help of Positive and Negative Feedback

S/108/60/015/006/010/012/XX
B010/B070

$$K(0)f_2 = \sqrt[4]{3}\,\frac{S}{2\pi C_1}\sqrt{K(0)} \cdot \sqrt[4]{1 - \frac{1}{m^2}}\,\frac{1}{\sqrt[4]{C}}\sqrt[4]{\frac{\gamma}{2 - \gamma}}\,,$$ where

$\gamma = \frac{-1 + \sqrt{1 + 3\alpha}}{3\alpha}$, and $\alpha = C^2/BD$. This formula is, thus, seen to have a structure similar to that of the formula derived by V. Elmor for inductive compensation. The quantities A, B, C, D, and the S/C ratio of the amplifier tubes, and, thus, the whole design of the circuit have to be such that $K(0)f_2$ has as large a value as possible. The relations for B, C, D given in Table 1 become very much simplified for $\gamma \approx 0.5$, where $K(0)f_2$ reaches its maximum. Then, the following relation holds for the standard case m = 1.3, the notations being those given in Table 1:

$\beta n \approx \frac{2}{K_0}(1 - 0.43\sqrt{a_0})$; and analogous results are obtained for circuits 2 and 3. The process for the design of, say, circuit 1 would be as follows:

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

85725

Correction of the Frequency Response Curve of Broad-band Amplifiers With the Help of Positive and Negative Feedback

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B010/B070

K(0), m, S/C, and K_c are assumed; the anode resistance R is obtained from the relation $R = \sqrt{\frac{K_c}{S^2}}$; the negative feedback resistance R_2 is obtained from $R_2 = \frac{1}{\varrho S}$; the value of βn is obtained for the magnitude of the positive feedback, for example, from the above-mentioned approximate formula for m = 1.3; from these values and the known internal resistance of the signal sources, the feedback capacitance is fixed: $C_2 = \beta n R C_1 / R_1 \cdot K(0) f_2$ and the maximum frequency are calculated from formula (15). Finally, two-stage circuits with inductance in the anode circuit and with π-filters are taken for comparison. Their equations for K contain polynomials of degree 3 and 4, and the corresponding values of $K(0)f_2$ differ but slightly. They have, however, the advantage over the circuits corrected by mixed feedback that they can be designed to be independent of the internal resistance of the signal source. There are 5 figures, 5 tables, and 4 Soviet references.

SUBMITTED: October 6, 1958

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APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

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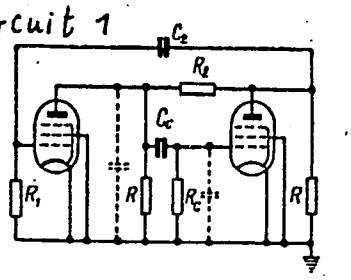
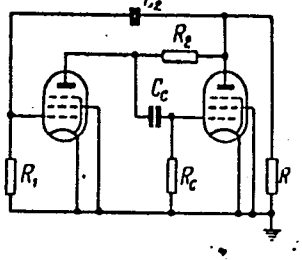
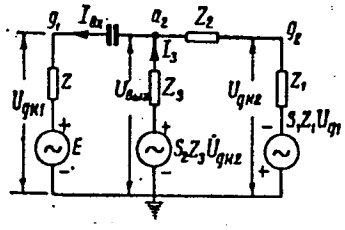
S/108/60/015/006/010/012/XX
B010/B070

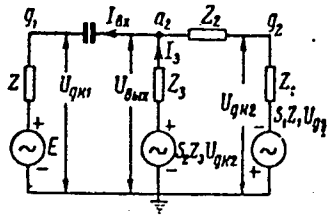
Circuit 1



Circuit 2







Card 5/8

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

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S/108/60/015/006/010/012/XX
B010/B070

$K_E = \frac{K_0}{a_0 + a_1 x + a_2 x^2 + a_3 x^3}$ $a_0 = 1 + K_0 \rho$ $a_1 = 2 + n + \beta n (1 + K_0 \rho - K_0)$ $a_2 = 1 + n + 2\beta n$ $a_3 = \beta n$ $M = \sqrt{\frac{A}{A + B\Omega + C\Omega^2 + D\Omega^3}}$ $A = a_0^2; \quad B = a_1^2 - 2a_0 a_2$ $C = a_2^2 - 2a_1 a_3; \quad D = a_3^2$	$K_E = \frac{K_0 - K_0 \rho}{a_0 + a_1 x + a_2 x^2 + a_3 x^3}$ $a_0 = \sqrt{K_0}\,\rho + K_0 \rho$ $a_1 = 1 + 2\sqrt{K_0}\,\rho + \beta n (2K_0 \rho + \sqrt{K_0}\rho - K_0)$ $a_2 = 1 + \beta n (2\sqrt{K_0}\,\rho + 1)$ $a_3 = \beta n$ $M = \sqrt{\frac{A}{A + B\Omega + C\Omega^2 + D\Omega^3}}$ $A = a_0^2; \quad B = a_1^2 - 2a_0 a_2$ $C = a_2^2 - 2a_1 a_3; \quad D = a_3^2$
$Z_1 = \frac{R}{1 + i\omega C_1 R}$ $\quad Z = R_1$ $Z_2 = R_2$ $\quad C_1 = C_{вых} + C_{вх} + C_M$ $Z_3 = \frac{R}{1 + i\omega C_3 R}$ $Z_c = \frac{1}{i\omega C_2}$	$Z_1 = \frac{1}{i\omega C_1}$ $\quad Z = R_1$ $Z_2 = R_2$ $\quad C_1 = C_{вых} + C_{вх} + C_M$ $Z_3 = \frac{R}{1 + i\omega C_3 R}$ $Z_{c2} = \frac{1}{i\omega C_2}$

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S/108/60/015/006/010/012/XX
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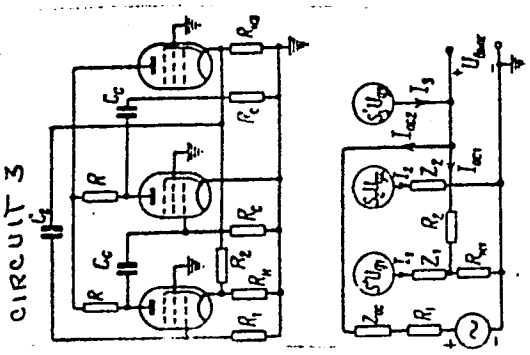
$K_0 = S^2R^2$ $\quad n = \frac{C_2}{C_1}$	$K_0 = S^2R^2$ $\quad n = \frac{C_2}{C}$ *)
$\rho = \frac{1}{SR_2}$ $\quad \beta = \frac{R_1}{R}$	$\rho = \frac{1}{SR_2}$ $\quad \beta = \frac{R_1}{R}$
$x = i\omega\tau$ $\quad \tau = RC$ *)	$x = i\omega\tau$ $\quad \tau = RC$ *)
$\lvert x \rvert = \omega\tau$ $\quad \Omega = (\omega\tau)^2 = \lvert x \rvert^2$	$\lvert x \rvert = \omega\tau$ $\quad \Omega = (\omega\tau)^2 = \lvert x \rvert^2$

CIRCUIT 3



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$$K_E = \frac{K_0 K_3}{a_0 + a_1 x + a_2 x^2 + a_3 x^3}$$

$$a_0 = (1 + \sqrt{K_0}\beta_1) + K_0 K_3 \beta_3$$

$$a_1 = (2 + \beta n)(\sqrt{K_0}\beta_1 + 1) + K_0 K_3 \beta n(\beta_3 - 1)$$

$$a_2 = (1 + 2\beta n) + (\sqrt{K_0}\beta_1 + 1)$$

$$a_3 = \beta n (1 + \sqrt{K_0}\beta_1)$$

$$M = \sqrt{\frac{A}{A + BM^2 + CM^4 + DM^6}}$$

$$A = a_0^2; \quad B = a_1^2 - 2a_0 a_2$$

$$C = a_2^2 - 2a_1 a_3; \quad D = a_3^2$$

$$S_1' = \frac{S}{1 + SR_{K_1}} \qquad Z_1 = Z_2 = \frac{R}{1 + i\omega CR}$$

$$S_2 = S \qquad Z_{ac} = \frac{1}{i\omega C_2}$$

$$S_3' = \frac{S}{1 + S(R_{K_1} + R_3)}$$

$$S_3' = \frac{S}{1 + SR_{K_1}}$$

$$\beta = \frac{R_1}{R} \quad \beta_1 = \frac{R_{K_1}}{R} \quad \beta_3 = \frac{R_{K_1}}{R_{K_1} + R_3}$$

$$K_0 = S^3 R^3 \quad K_{ua} = S_3 (R_3 + R_{K_1})$$

$$K_3 = \frac{K_{ua}}{1 + K_{ua}} \qquad n = \frac{C_2}{C_1}$$

$$x = i\omega\tau \qquad \Omega = (\omega\tau)^2$$

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

USTINOVA, L. B. Cand Tech Sci -- "Tube electrometers with feedback." Len, 1961. (Phys-Tech Inst im A. F. Ioffe, Acad Sci USSR). (KL, 4-61, 201)

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USTINOVA, L.B.

Electrometer amplifiers; survey. Prib. i tekh.eksp. 6 no.4: 5-19 Jl-Ag '61. (MIRA 14:9)
(Amplifiers (Electronics))

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ACCESSION NR: AP4041024 S/0120/64/000/003/0088/0094

AUTHOR: Parshin, A. V.; Romanova, N. N.; Ustinova, L. B.

TITLE: Methods for reducing the time constant of the input circuit of electrometric amplifiers

SOURCE: Pribory* i tekhnika eksperimenta, no. 3, 1964, 88-94

TOPIC TAGS: amplifier, electrometric amplifier, electrometric amplifier time constant

ABSTRACT: Two methods of correcting the transient response of electrometric amplifiers are described: (1) a correcting filter in the negative-feedback circuit and (2) a positive feedback. As the correction efficiency does not depend on the circuit type but rather on the order of the equation describing the circuit and on the number of independent correction parameters, both methods promise almost equal results. The reduction of the output-signal rise time is limited by: (a) the

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feedback-loop gain value K and its frequency dependence; (b) the spurious feedbacks; and (c) the nonexponential nature of the charge-discharge phenomena in the distributed capacitance of the input (high-megohm) resistor R. In amplifiers actually tested, a minimum rise time of 1.5 msec, with R = 10^{11} ohms, was attained; this time was limited by the value K = 500. Orig. art. has: 7 figures, 11 formulas, and 2 tables.

ASSOCIATION: Leningradskiy politekhnicheskiy institut im. M. I. Kalinina (Leningrad Polytechnic Institute)

SUBMITTED: 25Jun63 ENCL: 00

SUB CODE: EC NO REF SOV: 001 OTHER: 005

Card 2/2

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001858220009-6

PARSHIN, A.V.; USTINOVA, L.B.

Electrometric amplifiers on subminiature tubes. Prib. i tekh. eksp. 9 no.3:102-107 My-Je '64 (MIRA 18:1)

1. Leningradskiy politekhnicheskiy institut.

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