"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

10

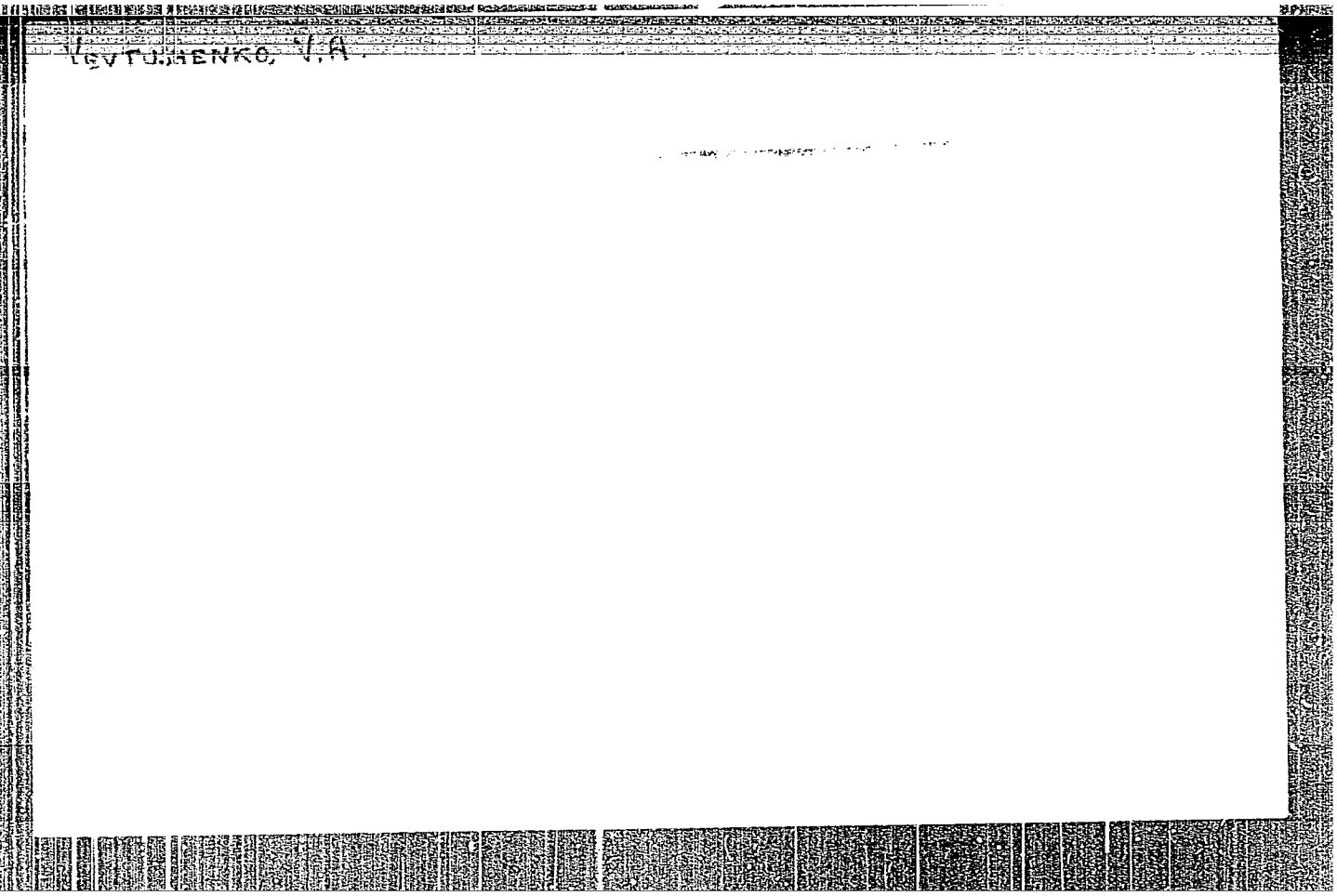
CA YEVTUSHENKO, V.A.

Compounds of alginic acid with magnesium. V. A. Evtushenko (Algae Research Lab. VNIRO, Arkhangelsk). *Kolloid. Zhur.* 13, 105-9(1951).—The soly., reported in the literature, of Mg alginate (I) would contradict E.'s theory (*Rybnoe Khozyaistvo* 7 (1949)) that only alginates of univalent metals are sol. Neutral I was prepd. by repeated washing of a film of alginic anhydride (II) with 20% aq. $MgSO_4$ or aq. $MgCl_2$; it contained 10.7% Mg (in a dry specimen) and was insol. in H_2O. I obtained from a gel of II and a suspension of $Mg(OH)_2$ contained 10.1–10.3% MgO, presumably contained $—CO_2MgOH$ and $—CO_2H$ groups rather than the $—CO_2MgOCO—$ group of the neutral I, and was sol. in H_2O. From the "basic" I and satd. $Mg(OH)_2$ soln. was prepd. a compd. contg. 17.8–18.1% MgO; it presumably contained 2 $—CO_2MgOH$ groups for every unit of II ($C_{11}H_{16}O_{11}$); it was sol. This compd gave a sol. compd. (15.0–15.5% MgO, 22.8% AcOH) with 5% AcOH.

J. J. Bikerman

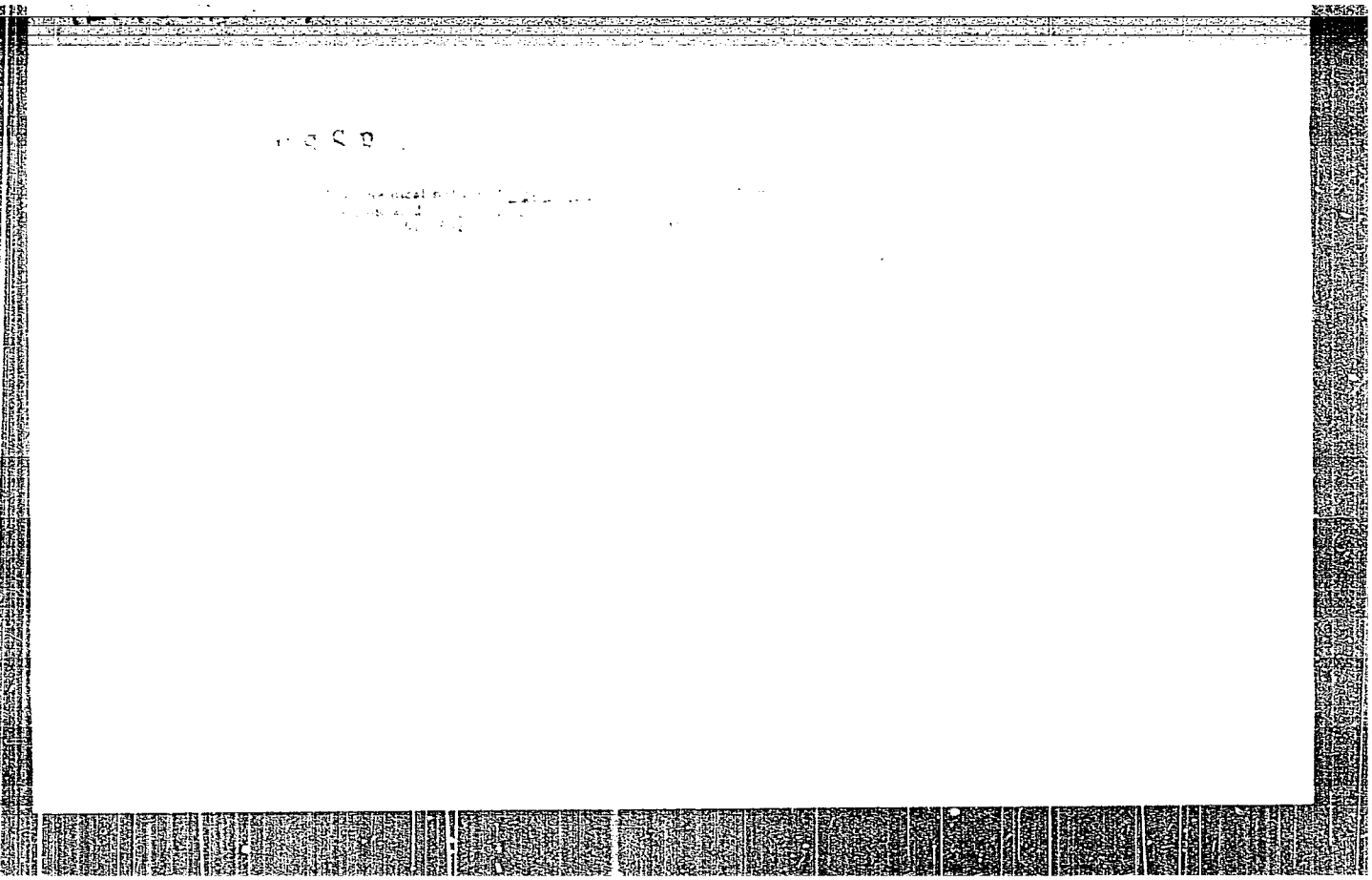
APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4



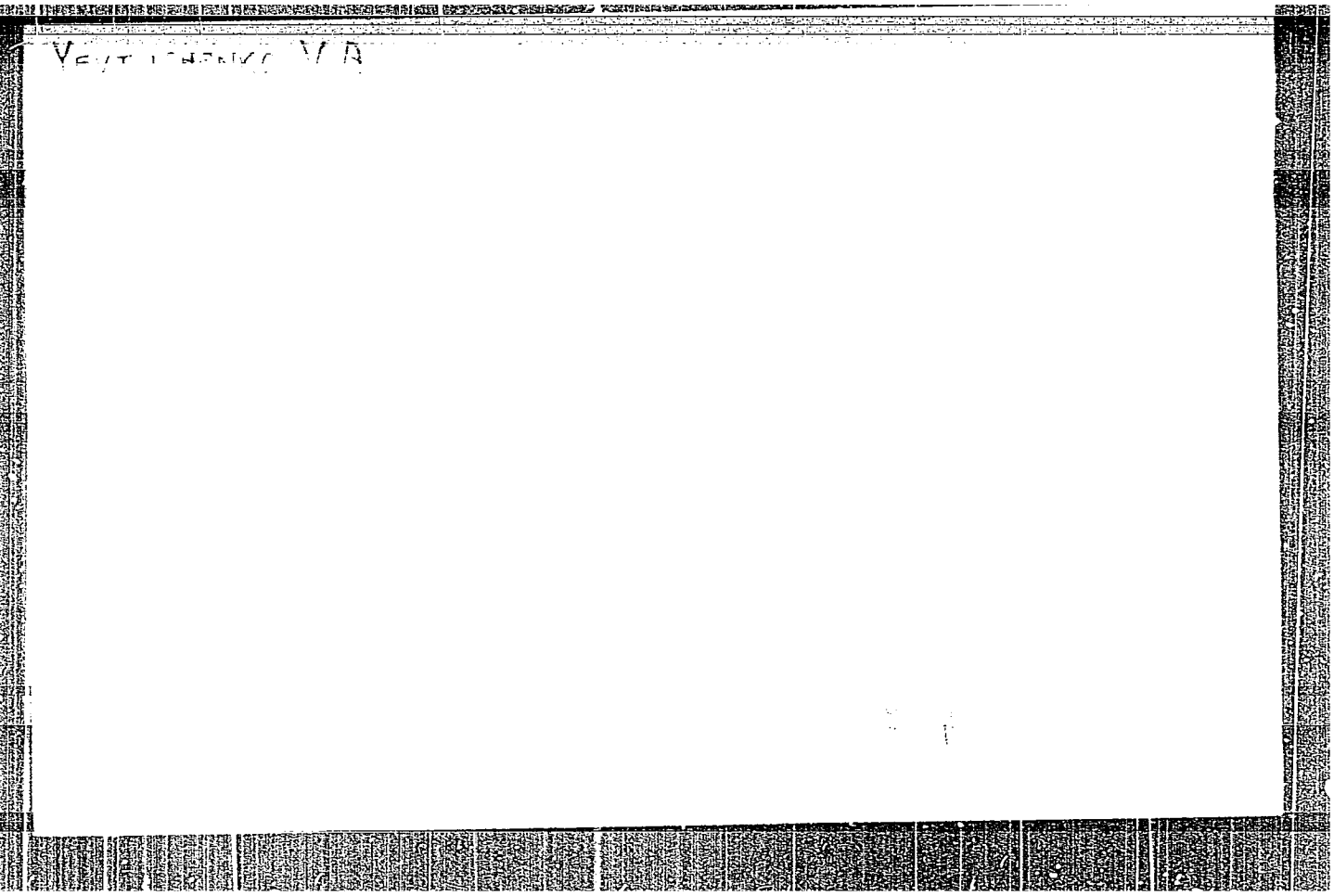
APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4



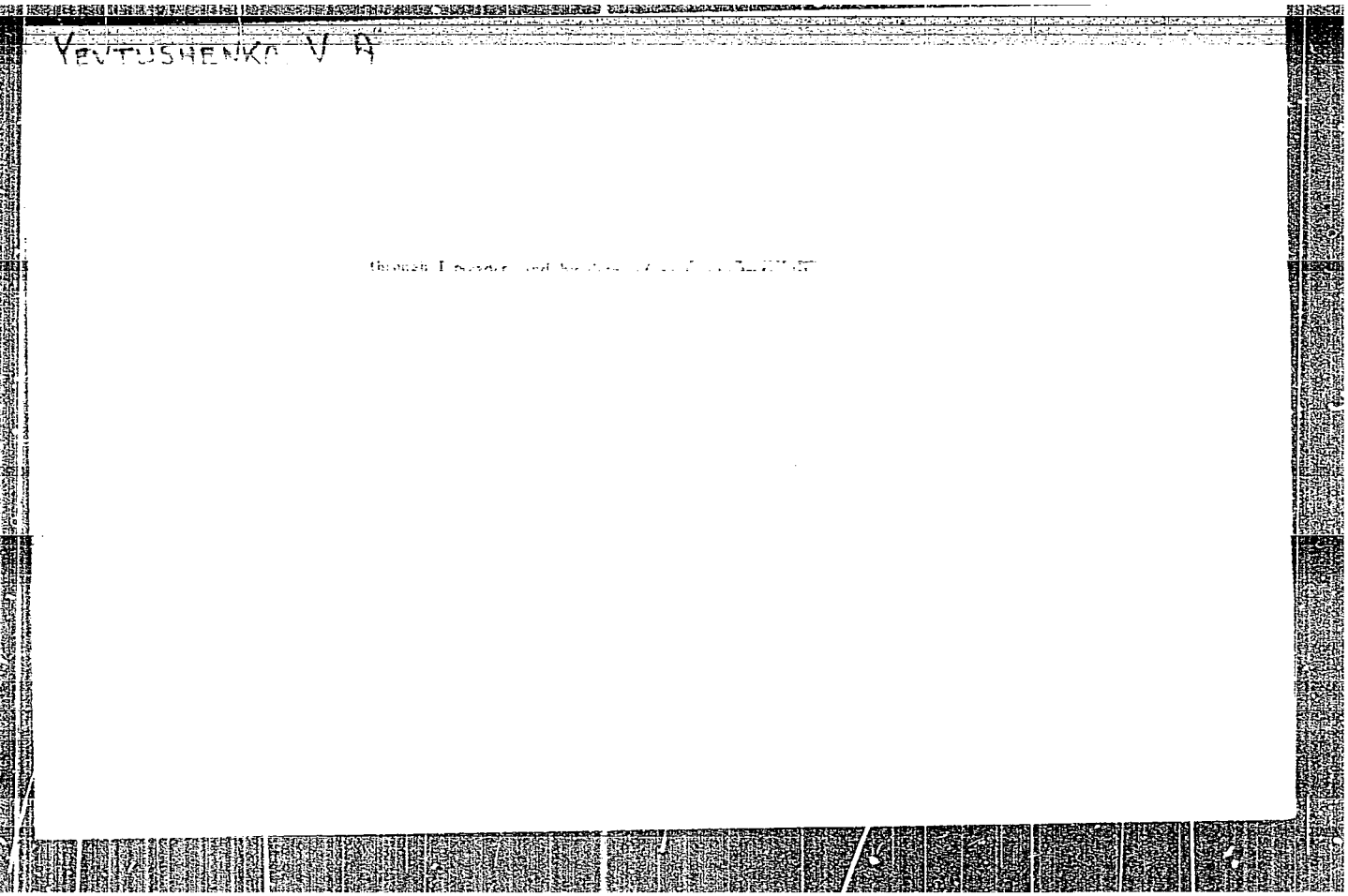
APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4



APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4



APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

EVTUSHENKO, V.A.

USSR/Chemistry of High-Molecular Substances, F

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 1175

Author: Evtushenko, V.A.

Institution: Institute for High-Molecular Compounds, Academy of Sciences USSR

Title: Some Problems in the Chemistry of Alginic Acids.

Original Periodical: Avtoref. diss. kand. khim. n., in-t vysokomolekul. soedineniy AN SSSR, Leningrad, 1956.

Abstract: None

Card 1/1

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

5(4),28(2)
AUTHORS: Bergo, B.G., Pletonov, V.M., Aerov, M.E., Yevtushenko, V.A.

S/064/59/000/07/001/035
B005/B123

TITLE: Computation of Rectification on Analog Computers

PERIODICAL: Khimicheskaya promyshlennost', 1959, Nr 7, pp 555-560 (USSR)

ABSTRACT: The editors of the periodical refer to the fact that the method described in the present paper is based on the assumption of a complete countercurrent vapor - liquid. This supposition would have to be proved, however, for disk columns. This article was published, nevertheless, in order to draw attention to the possibility of using analog computers for the computation of processes in chemical technology. The use of analog computers for the computation of rectification, condensation, and other processes of gas fractionation makes it possible to mechanize this computation procedure in scientific institutes and industrial laboratories. The usual computation of rectification is based on the concept of "theoretical plates". This concept is, however, a very crude simplification as the vapor concentration changes continuously in real fractionating columns. The transfer of mass from liquid to vapor can be

Card 1/4

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

represented by the basic equation

$$\frac{dl_i}{dH} = \beta_x \left(X_i - \frac{Y_i}{K_i} \right) \quad (1)$$

For the computation of analog computers this equation is brought into the following form: $l_p = L - \sum_{i=1}^{p-1} l_i$ (7). This equation characterizes the total mass balance. It is composed of two systems of differential equations (one for the fractionating and one for the concentrating section of the column). The boundary conditions for solving the equations result from the construction of the respective columns. Generally the computation of one fractionating column demands the solution of two equation systems of general differential equations of (p-1)st order. In the present paper the two mentioned systems of differential equations are solved by integrating in the MGU computation center of an analog computer, type IPT-5. The boundary conditions are given by one system of linear and one of nonlinear algebraic equations. The results of the rectification computations are not unequivocal, as the system contains some

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

degrees of freedom that can, however, be fixed by arbitrary restrictions. The computation procedure worked out was tested with various fractionating columns. Table 1 gives a survey over the products of ethane fractionation in a column and over the relative volatilities of components; table 2 shows the distribution of components in the fractionating column for ethane. Table 2 and figure 3 show similar conditions found in the course of fractionating methane. The results of the completed computations prove that the rectification procedure can be computed on analog computers with satisfying accuracy and great time saving. Because of these reasons the use of analog computers in scientific research institutes and planning institutes is highly recommended. The whole computation procedure is described in detail in the paper. Meaning of symbols used in equations: l_i - amount of any component i in the liquid (mol/hour); β_x - coefficient of transfer of mass, referred to the concentration difference in the liquid (mol/hour.m); H - coordinate of any cross-section (in m); X_i, Y_i - absolute concentrations of the component i in the liquid or in vapor respectively (mol/mol); K - equilibrium constant for the component i; L - amount of liquid (mol/hour). There are 4 figures, 2 tables, and 3

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

Computation of Rectification on Analog Computers S/064/59/000/07/001/035
B005/B123

references.

ASSOCIATION: Nauchno-issledovatel'skiy institut sinteticheskikh spirtov i organicheskikh produktov (Scientific Research Institute for Synthetic Alcohols and Organic Products). Moskovskiy gosudarstvennyy universitet (Moscow State University)

Card 4/4

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

BREKHOVSKIKH, L.M.; LYUTUSHENKO, V.A.; NAKAROV, S.S.; PISARENKO, V.F.

Calculation of the vertical profile of the velocity of sound propagation in the sea. Dokl. AN SSSR 135 no.3:581-583 N '60.
(MIRA 13:12)

1. Akusticheskiy institut Akademii nauk SSSR. 2. Chlen-korrespondent AN SSSR (for Brekhovskikh).
(Sound—Speed)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

YEVTUSHENKO, V.A.; MAKHNOVA, G.V.

Solubility of mannitol. Zhur.prikl.khim. 35 no.4:747-750 Ap '62. (MIRA 15:4)
(Mannitol) (Solubility)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

YEVTUSHENKO, V.A.; VARFOLOMEYEVA, G.V.

Structure of agar gels. Part 1: Electron microscope study. Vysokom. soed. 5 no.12:1867-1869 D '63. (MIRA 17:1)

1. Severnyy nauchno-issledovatel'skiy institut promyshlennosti.

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

YEVTUSHENKO, V.A.

Dynamics of the waters of the Gulf of Riga. Okeanologiia 3 no.2:235-242 '63. (MIRA 16:4)

1. Moskovskiy institut radioelektroniki i gornoy elektromekhaniki. (Riga, Gulf of—Hydrology)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

SOV/137-58-11-21945

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 11, p 16 (USSR)

AUTHORS: Yevtushenko, V. B., Strelets, M. N.

TITLE: Automatic Regulation and Heat Control in Continuous Steel Casting (Avtomaticheskoye regulirovaniye i teplovoy kontrol' protsessa nepreryvnoy razlivki stali)

PERIODICAL: Sb. nauchn. rabot stud. Donetsk. industr. in-t, 1957, Nr 2, pp 77-83

ABSTRACT: A presentation is made of the significance of the continuous steel-casting process (CSP) in terms of increase in rate of output, reduction in cost, and improvement in the conditions of labor and the quality of production. It is noted that introduction of this new method into industry is impossible without complete automation of the process. An analysis of the process is made, equations are suggested, and the conclusion is drawn that there are significant inadequacies in the automatic-regulation and heat-control circuits in CSP at the Novo-Tul'skiy (Tula) and the Krasnoye Sormovo plants. A new, more advanced design for automatic regulation and heat control for the CSP is offered, with a list of the parameters to be regulated and controlled, and recommendations are offered for further improvement in the design.

M. L.

Card 1/1

Metallurgical Faculty, Donetsk Industrial Inst.

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

GLAZKOV, P.G., inzh.; SLADKOSHTEYEV, V.T., kand.tekhn.nauk; TELESOV, S.A., inzh.; OFENGENDEN, A.M., inzh.; STRELETS, V.M., kand.tekhn.nauk; MURZOV, K.P., inzh.; Prinimali uchastiye: MALAKHA, A.V.; DRUZHININ, I.I.; YELISOF, A.V.; YEVTUSHENKO, V.B.; OSIPOV, V.G.; BABASKIN, Yu.Z.; SLIN'KO, A.N.; ZELENOV, S.N.; GENKIN, V.Ya.; PITAK, N.V.; VYSOTSKAYA, T.M.

Investigating the operation of multiple-pit continuous steel casting arrangements. Trudy Ukr. nauch.-issl. inst. met. no.7:133-142 '61. (MIRA 14:11)

(Continuous casting--Equipment and supplies)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

YEVTUSHENKO, V.G., elektromekhanik

Deciphering cells are working steadily. Avtom., telem. i svyaz' 2 no.10:37 O '58. (MIRA 11:10)

1.Laboratoriya signalizatsii i svyazi Yugo-Zapadnoy dorogi.
(Cipher and telegraph codes--Railroads)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

BRITCHENKO, M.Ye., inzh.; YEVTUSHENKO, V.I., inzh.

Methods for calculating basic schedule norms for planning the operations in lot production. Mashinostroenie no.1:9-12 Ja-F '65. (MIRA 18:4)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

ACC NR: AP6033682 SOURCE CODE: UR/0106/66/000/010/0031/0037

AUTHOR: Kopp, V. M.; Ponomarenko, V. A.; Yevtushenko, V. V.; Raykin, P. S.

ORG: none

TITLE: Pulse noise analyzer for multiple high frequency telephone channel systems used for data transmission

SOURCE: Elektrosvyaz', no. 10, 1966, 31-37

TOPIC TAGS: multichannel telephone system, carrier frequency telephone, data transmission, transmission line, noise analyzer, random noise signal, ergodic theory, statistic analysis, statistic distribution

ABSTRACT: Technical characteristics, design principles, and the operation of a pulse noise analyzer for use with digital data in multichannel transmission links are described. The analyzer generates an integral distribution function of the instantaneous amplitude values of pulse noise and, simultaneously, the probability distribution of noise pulse durations at a predetermined amplitude level. The integral distribution function of noise pulses is determined by measuring the dwell time of the instantaneous values of their amplitudes at the seven following voltage levels: 18, 24, 36, 54, 72, 108, and 144 millivolts. The lower value was selected to eliminate the effect of the demodulator offset while the upper value was based on preliminary experiments.

Card 1/3 UDC: 621.317.795.3

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

ACC NR: AP6033682

The integral distribution function, assuming that the random process is stationary and ergodic, is determined through instrumentation as a result of the measurement of the relative dwell time of one of its states above a predetermined level. To this end, the random signals are fed into an amplitude threshold discriminator. Every excursion of the input signal above the preset trigger level of a particular threshold discriminator causes an output pulse to be generated, the duration of which equals the dwell time of the random pulse at this level. The additive dwell time of such pulses during the experiment equals the total process time. It is expedient to measure this parameter digitally. Hence, the dwell pulses are converted into pulse trains by using the former as gates for clock pulses. The number of clock pulses in each train corresponds to the dwell time of the original noise pulse. The clock pulses are counted and the relative process time is obtained as a ratio of the total noise time to the total duration of the experiment. In addition to this result, the probability density of the dwell time at a given voltage level is generated by counting the pulses in the individual trains and recording the original pulses in appropriate time increment channels in accordance with their dwell times. The analyzer based on these principles is described in some detail, including a block diagram, and an example is used to illustrate the operation of the instrument. The authors conclude that for the statistical analysis of noise in a multichannel communication link it is sufficient to determine the total dwell time of the noise pulses above a given level. The analysis of the instantaneous amplitudes and durations of the noise pulses provides the

Card 2/3

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

ACC NR: AP6033682

possibility to compute the two-dimensional probability distribution of this noise. Orig. art. has: 3 figures.

SUB CODE: 09,17/ SUBM DATE: 09Nov65/ ORIG REF: 004

Card 3/3

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

BUGRO, F.Ye., inah.; YEVTUSHENKO, V.V., inzh.; KARPOV, B.P., inzh.

Waterproof quick-setting concrete for the reinforcement of vertical shafts in mines. Shakht.stroi. 6 no.11:13-14 N '62. (MIRA 15:12)

1. Pechorskiy nauchno-issledovatel'skiy ugol'nyy institut.
(Mine timbering) (Concrete)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

GLAZKOV, P.G., inzh.; GRIGOR'YEV, F.N., inzh.; MURZOV, K.[illegible], inzh.; SLADKOSHTEYEV, V.T., inzh.; Prinimali uchastiye: MALAKHA, A.V.; POKRASS, L.M.; DRUZHININ, I.I.; OSIPOV, V.G.; KONDRATYUK, A.M.; POLYAKOV, I.V.; GORDIYENKO, M.S.; PAVLOV, M.T.; KOPYTIN, A.V.; PARASHCHENKO, R.A.; POTANIN, R.V.; AKHTYRSKIY, V.I.; BRUK, S.M.; YEVTUSHENKO, V.V.; LEYTES, A.V.; STRELETS, V.M.

Continuous casting of 140-ton steel heats with four-channel equipment. Stal' 22 no. 6:501-504 Je '62. (MIRA 16:7)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

ACCESSION NR: AP4020314 S/0302/64/000/001/0032/0033

AUTHOR: Yevtushenko, V. V.

TITLE: Luminous-digit dekade counter

SOURCE: Avtomatika i priborostroyeniye, no. 1, 1964, 32-33

TOPIC TAGS: counter, pulse counter, dekade counter, luminous digit counter, luminous digit dekade counter

ABSTRACT: A new dekade pulse counter with luminous digit indication has been developed for use in conjunction with digital instruments. The counter, briefly described in the article, consists of a counting chain, a decoder, and a digit-indication unit (see Enclosure 1). Triggers T_1 - T_4 count the pulses with a scaling ratio of 2^4. Feedbacks between the triggers and the decoder convert the binary-decimal code of the counter into a decimal indication on the dial. A diagram of the connections of the transistorized indicator is given, and the

Card 1/3

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

ACCESSION NR: AP4020314

functioning of the entire device is explained. The counter is reported to have had a stable operation within an ambient temperature range of -5+55C. Orig. art. has: 2 figures.

ASSOCIATION: Tsentral'ny*y nauchno-issledovatel'skiy institut svyazi, Kievskoye otdeleniye (Central Scientific-Research Institute of Communications, Kiev Branch)

SUBMITTED: 00 DATE ACQ: 31Mar64 ENCL: 01

SUB CODE: IE NO REF SOV: 000 OTHER: 000

Card 2/3

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

ZELENIN, N.I.; PREYS, M.O.; FEOFILOV, Ye.Ye.; CHERNYSHEVA, K.B.; YEFIMOV, V.A.; TSIPEROVICH, M.V.; YEVTUSHENKO, V.Ya.

Using methanol extract from the middle cut of shale tar in the flotation of coal. Khim. i tekh. gor. slan. i prod. ikh perer. no.8:102-116 '60. (MIRA 15:2)
(Methanol)
(Coal)
(Flotation)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

YEVTUSHENKO, Ye. D.

MRYKHIN, N.I.; YEVTUSHENKO, Ye.D.

Practices of the Khabarovsk Oil Extraction Plant. Masl.-zhir.prom. 23 no.7:37-38 '57. (MLRA 10:8)

1.Ministerstvo promyshlennosti prodovol'stvennykh tovarov (for Mrykhin) 2.Khabarovskiy maslozhirkombinat (for Yevtushenko)
(Soybean)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

MALINOVSKIY, M.S.; SOLOMKO, Z.F.; YEVTUSHENKO, Ye.I.

Interaction between β-chloroethylchlorosulfonate and esters of phosphorus acids. Zhur.ob.khim. 30 no.8:2591-2593 Ag '60. (MIRA 13:8)

1. Dnepropetrovskiy gosudarstvennyy universitet.
(Phosphorus acids) (Sulfonic acids)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

POPOV, N.A.; YEVTUSHENKO, Ye.I.

Deriving latitude variations from observations on the universal instrument. (MLRA 6:6)
Trudy Polt.grav.obser. 4:250-293 '51.
(Latitude variation) (Stars--Observations)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

YEVTUSHENKO, Ye.I.; OGORODNIK, I.P.

Results of observations on the large zenith telescope at the Poltava Observatory during the period 1949.7-1950.9. Ogorodnik. Trudy Polt.grav. obser. 4:328-337 '51. (MLRA 6:6)

(Stars--Observations)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

PA 227T37

USSR/Astronomy - Moon's Oscillations 1 Aug 52

"Lunar Half-Monthly Oscillations in Latitude According to Observations at the Stations of Karloforte and Yukaya From 1899 to 1934" Ye. P. Fedorov, Ye. I. Yevtushenko, Gravimetric Obs of Acad Sci Ukrainian SSR, Poltava

"Dok Ak Nauk SSSR" Vol 85, No 4, pp 731, 732

Gives the results of operating on all the published observations at the 2 subject stations (namely, 66,220 observations at Karloforte, and 65,736 observations at Yukaya). States that in the analysis of the half-monthly oscillations

227T37

YEVTUSHENKO, YE. I.

of latitude they detd 2 waves: tidal and nutational. Submitted by Acad V.G. Fesenkov 7 Jun 52.

227T37

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

1. FEDOROV, YE. P. and YEVTUSHENKO, YE. I.

2. USSR (600)

4. Latitude Variation-San Pietro, Italy

7. Semimonthly lunar variations in latitude based on observations made at stations in Carloforte and Ukiah from 1899-1934. Astron.tsir. no. 126, 1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

1. YEVTUSHENKO, YE. I.

2. USSR (600)

4. Latitude

7. Semimonthly lunar wave in latitude observation at the Mitsuzava station. Astron. tsir. no. 132 1952

9. Monthly List of Russian Accessions, Library of Congress, June 1953. Unclassified.

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

YEVTUSHENKO, Ye.

FEDOROV, Ye.; YEVTUSHENKO, Ye.

Daily latitude variations according to observations made on two zenith telescopes at Poltava. Astron.tsir. no.152:17-18 S '54. (MLRA 8:3)

1. Poltavs observatoriya.
(Poltava--Latitude variation)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

YEVTUSHENKO, Ye.I.; OGORODNIK, I.P.

Fluctuations of Poltava latitude observed with the Zeiss zenith telescope during the period from September 1949 to June 1956. Trudy Polt. grav. obser. 7:3-25 '58. (MIRA 11:10)
(Poltava--Latitude)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

YEVTUSHENKO, Ye.I.

PHASE I BOOK EXPLOITATION SOV/5742

Akademiya nauk SSSR. Mezhduvedomstvennyy komitet po provedeniyu Mezhdunarodnogo geofizicheskogo goda. VIII razdel programmy MGG: Shiroty i dolgoty.

Predvaritel'nyye rezul'taty issledovaniy kolebaniy shirot i dvizheniya polyusov zemli; sbornik statey (Preliminary Data of Latitude Variations and Migrations of the Earth's Poles; Collected Articles. No. 1) Moscow, Izd-vo AN SSSR, 1960. 97 p. Errata slip inserted. 1,000 copies printed.

PURPOSE: This collection of articles is intended for astronomers, geophysicists, and other scientists concerned with the problem of latitude variations and the migration of the Earth's poles.

COVERAGE: Part I of the collection contains preliminary results of latitude observations from 1957.5 through 1959.0 made at IGY stations in the USSR network, including new stations in Siberia. Part II consists of articles describing new instruments, observational programs and methods, and procedures of processing the latitude observational data. With the larger number of stations and the use of new instruments it is anticipated that the final results will provide a more comprehensive study of anomalies and instrumental

Card 1/5

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

errors in latitude observations than has been possible previously. No personalities are mentioned. English abstracts and references follow each article.

TABLE OF CONTENTS:

Preface 5

PART ONE

Romanskaya, S. V., L. D. Kostina, and N. R. Andreyenko. Latitude Observations at the Main Astronomical Observatory of the Academy of Sciences USSR (Freyberg-Kondrat'yev Zenith-Telescope) 7

Yevtushenko, Ye. I., I. P. Ogorodnik, and O. V. Chuprunova. Observations of Talcott Pairs at the Poltava Gravimetrical Observatory of the Ukrainian Academy of Sciences (Zeiss Zenith-Telescope) 9

Popov, N. A. Observations of Bright Zenith Stars at the Poltava Gravimetrical Observatory of the Ukrainian Academy of Sciences (Zeiss Zenith-Telescope) 13

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

Preliminary Data of Latitude Variations (Cont.) SOV/5742

Panchenko, N. I., Ye. P. Fedorov, and A. P. Tsapova. Observations of Talcott Pairs at the Poltava Gravimetrical Observatory of the Ukrainian Academy of Sciences (Bamberg Zenith-Telescope) 17

Obrezkova, Ye. I. Observations of Bright Zenith Stars at the Poltava Gravimetrical Observatory of the Ukrainian Academy of Sciences (Bamberg Zenith-Telescope) 20

Kapralov, V. P., P. M. Rabinskiy, and N. A. Chudovicheva. Latitude Observations at the Astronomical Observatory imeni Engel'gardt (ZTL-180 Zenith-Telescope) 25

Kravtsev, D. I. Latitude Observations at the Kitab International Latitude Station imeni Ulug-bek (Bamberg Zenith-Telescope) 28

Mansurova, K. S. Latitude Observations at the Irkutsk State University Astronomical Observatory imeni A. A. Zhdanov (ZTL-180 Zenith-Telescope) 31

Card 3/5

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

PART TWO

Sakharov, V. I., and I. F. Korbut. The Determination of Pulkovo Latitude Variations From Parallel Observations With Two Zenith Telescopes 34

Kalmykov, A. M. Preliminary Results of Comparing Observations With Two Zenith Telescopes of the Kitab Latitude Station During the Period 1957.5-1959.0 43

Golikova, T. I., O. M. Zhukova, V. V. Nesterov, and Yu. I. Prodan. Preliminary Results of Processing Observations With the Moscow Zenith Telescope During 1958 47

Potter, Kh. I., and V. A. Naumov. Theory and Method of Processing Photographic Zenith Tube [PZT] Observations 56

Bakhrakh, N. M., and Kh. I. Potter. List of Stars on the Pulkovo Photographic Zenith Tube [PZT] Program 68

Rubashevskiy, A. A., and Ye. P. Fedorov. On the Question of Evaluating the Accuracy of Latitude Observations 75

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

Rabinskiy, P. M. On the Question of Selecting the Most Expedient Method of Determining the Value of a Screw Turn on an Ocular Micrometer 82

Popov, N. A. Changes in the Position of the Horizontal Axis of a Transit Instrument With the Position Depending on the Direction of Turning the Tube 88

Glagoleva, I. I. Determination of the Value of a Screw Turn on an Ocular Micrometer According to Observations of Transits of Zenith Stars 92

AVAILABLE: Library of Congress

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

BALENKO, V.G.; YEVTUSHENKO, Ye.I.

Pevtsev's method for a harmonic analysis of 50-day series of observations of tidal gravity variations. Trudy Polt. grav. obser. 12: 27-47 '63. (MIRA 16:9)

(Tides)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

MATVEYEV, P.S.; GOLUBITSKIY, V.G.; YEVTUSHENKO, Ye.I.

Relationship between the free period of oscillation of horizontal pendulums with Zollner-type suspensions and the oscillation amplitude. Trudy Polt. grav. obser. 12:100-109 '63. (MIRA 16:9)
(Pendulum)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

YEVTUSHENKO, Ye.I.; YATSKIV, Ya.S.

Determining the value of one turn of the optical micrometer screw. Trudy Polt. grav. obser. 11:88-93 '62. (MIRA 15:11)

(Micrometer)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

OGORODNIK, I.P.; YEVTUSHENKO, Ye.I.; CHUPRUNOVA, O.V.

Latitude variations at Poltava based on observations performed on the Zeiss zenith telescope during the period June 1956 through May 1957. Trudy Polt. grav. obser. 11:104-110 '62. (MIRA 15:11)

(Poltava—Latitude variation)
(Telescope, Zenith)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

YEVTUSHENKO, Yu.G. (Moscow):

"The effect of aerodynamical moments on the motion of a solid about its centre of mass."

report presented at the 2nd All-Union Congress on Theoretical and Applied Mechanics, Moscow, 29 Jan - 5 Feb 64.

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

YEVTUSHENKO, Yu. G.; CHERNOUSKO, F. L.

"Asymptotic methods for solution of some problems of satellite dynamics."

report submitted for 15th Intl Astronautical Cong, Warsaw, 7-12 Sep 64.

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

YEVTUSHENKO, Yu.G. (Moskva)

Asymptotic calculation of the effect of the relative motion of a satellite on the motion of its center of mass. Zhur. vych. mat. i mat. fiz. 5 no.2:262-273 Mr-Ap '65. (MIRA 18:5)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

L 46721-66 EWT(1)/EWP(m) GW

ACC NR: AP6022529 SOURCE CODE: UR/0040/66/030/003/0594/0598

79
78
B

AUTHOR: Yevtushenko, Yu. G. (Moscow)

ORG: none

TITLE: The influence of tangential acceleration on the motion of a satellite

SOURCE: Prikladnaya matematika i mekhanika, v. 30, no. 3, 1966, 594-598

TOPIC TAGS: circular orbit, elliptic orbit, artificial satellite orbit, propulsion thrust, ACCELERATION EFFECT

ABSTRACT: A previously applied approximation method is applied to obtain an asymptotically correct account of the effect of a small tangential acceleration on the motion of a satellite. The system of equations for the plane motion of a satellite under the influence of a tangential acceleration f is given by

$$\frac{dz}{d\tau} = \frac{2ez^{3/2}}{\sqrt{1-e^2}}\sqrt{1+2a\cos u+2b\sin u+c^2}, \quad \frac{du}{d\tau} = \frac{(1+a\cos u+b\sin u)^2}{[z(1-e^2)]^{3/2}}$$

$$\frac{da}{d\tau} = \frac{2e(a+\cos u)\sqrt{z(1-e^2)}}{\sqrt{1+2a\cos u+2b\sin u+c^2}}, \quad \frac{db}{d\tau} = \frac{2e(b+\sin u)\sqrt{z(1-e^2)}}{\sqrt{1+2a\cos u+2b\sin u+c^2}}$$

where μ is gravitational constant; Z is the semimajor axis of the osculating ellipse;

Card 1/3

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

u is the central angle between the position of the satellite and some fixed direction; a and b are variables related to the eccentricity e of the orbit and the angular position of the perigee σ by

$$e^2 = a^2 + b^2 \quad \tan \sigma = b/a$$

Introducing the parameter $\varepsilon = f r_1^2/\mu$ where r_1 is some characteristic size of the motion, the dimensionless parameters corresponding to t and Z are given by

$$\tau = t \sqrt{\mu} r_1^{-3/2}, \qquad \chi = Z r_1^{-1}$$

When ε is set equal to 0, the usual equations for Kepler motion result. Letting a subscript 0 denote an initial value, the following approximations are given:

$$z = \frac{z_0 e_0^3}{e^3} \frac{1 + {}^9/_8 e_0^2 + {}^{15}/_{64} e_0^4 + {}^{175}/_{1024} e_0^6 + {}^{2205}/_{16384} e_0^8}{1 + {}^9/_8 e^2 + {}^{15}/_{64} e^4 + {}^{175}/_{1024} e^6 + {}^{2205}/_{16384} e^8}$$

$$\tau = \frac{\sqrt{\pi}}{2s \sqrt{z_0 [K(e_0) - E(e_0)]}} [e_0 - e + {}^{13}/_{48} (e_0^3 - e^3) + {}^{363}/_{2560} (e_0^5 - e^5)]$$

$$N = \frac{\pi [e_0^4 - e^4 + {}^{11}/_{12} (e_0^6 - e^6) + {}^{109}/_{128} (e_0^8 - e^8)]}{128 s z_0^3 [K(e_0) - E(e_0)]^3}$$

where $N = \int_0^{\tau} \frac{d\tau}{T}$

The method has been applied before but the authors carry the approximation to several orders higher than in the calculations of previous authors. The problem of an

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

L 46721-66

ACC NR: AP6022529

initially nearly circular orbit is also discussed. A set of approximate solutions for the case where the initial eccentricity is of order ε are obtained. For example, the semimajor axis z grows monotonically with the dimensionless time τ approximately according to

$$z = z_0(1 - 4e\tau\sqrt{z_0})^{-2}$$

An expression for the apogee and perigee is derived. The approximations are compared to solutions obtained by numerical integration. The results for z are accurate to 1 part in 10^5; for e, 1/2 part in 10^3; for u, 1 part in 10^6. The author thanks N. N. Moiseyev for his interest in the work. Orig. art. has: 25 formulas, 1 figure.

SUB CODE: 22/ SUBM DATE: 30Oct65/ ORIG REF: 006/ OTH REF: 004

Card 3/3 LC

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

AZIMOV, A.A.; GRIBACHEV, A.A.; YEVTUSHENKO, Yu.I.; YEPIMAKHOV, N.M.; KACHANOVICH, L.L.

Studying the travel mechanism of the door extractor with various systems of speed regulation. Koks i khim. no.10:51-58 '63. (MIRA 16:11)

1. Konstruktorskoye byuro Koksokhimmash (for Azimov, Gribachev, Yevtushenko). 2. Bagleyskiy koksokhimicheskiy zavod (for Yepimakhov, Kachanovich).

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

TSAPKO, A.S., otv.red.; GLIKMAN, S.A., doktor khim. nauk, prof., red.; GEMP, K.P., st. nauchn. sotr., red.; GRYUNER, V.S., doktor tekhn. nauk, red.; DANILOV, S.N., red.; YEVTUSHENKO, V.A., kand. khim. nauk, red.; ZINOVA, A.D., kand. biol. nauk, red.; KIZEVETTER, I.V., doktor tekhn. nauk, red.; KIREYEVA, M.S., kand. biol. nauk, red.; VULIKHMAN, M.A., red.; POTEKHIN, L.P., red.

[Transactions of the First All-Union Conference of Workers in the Algal Industry of the U.S.S.R.] Trudy Pervogo Vsesoiuznogo nauchno-tekhnicheskogo soveshchaniia po vodoroslevoi promyshlennosti SSSR. Arkhangel'sk, Arkhangel'skoe knizhnoe izd-vo. Vol.1. 1962. 214 p. (MIRA 17:12)

1. Vsesoyuznoye soveshchaniye rabotnikov vodoroslevoy promyshlennosti SSSR. 1st. 2. Chlen-korrespondent AN SSSR (for Danilov). 3. Vsesoyuznyy nauchnyy institut morskogo rybnogo khozyaystva i okeanografii (for Kireyeva). 4. Nachal'nik Upravleniya rybnoy promyshlennosti Arkhangel'skogo sovnarkhoza (for TSapko). 5. Saratovskiy gosudarstvennyy universiteta im. N.G.Chernyshevskogo (for Glikman).

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

LEVCHUK, V.N., inzh.; YEVTUSHENKO, V.V., inzh.; POLYANSKIY, V.I., inzh.

Crosscutting of shaft bottoms in Vorkuta mines. Shakht. stroi. 8 no.8:22-23 Ag '64. (MIRA 17:9)

1. Pechorskiy nauchno-issledovatel'skiy ugol'nyy institut (for Levchuk, Yevtushenko). 2. Shakhtostroitel'noye upravleniye No.1 kombinata Pechorshakhtostroy (for Polyanskiy).

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

YEVTUSHEVSKIY, A.A., mekhanik putеizmeritel'noy telezhki

Exemplary section. Put' i put. khoz. 9 no.3:36 '65.
(MIRA 18:6)

1. Stantsiya Gudermes, Severo-Kavkazskoy dorogi.

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

YEVTUSHIK, L.Ye. (Moscow)

On the geometry of double integrals. Mat. sbor. 37 no.1:197-208 Jl-Ag'55. (MLRA 8:11)
(Integrals, Multiple) (Spaces, Generalized)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

68018

~~16(1)~~ 16.5600 SOV/155-58-6-19/36

AUTHOR: Yevtushik, L.Ye.

TITLE: The Geometry of the Integral $\int F(x^{\alpha}, x^{n}, x^{n}_{\alpha}, x^{n}_{\alpha\beta}) \left[dx^{1},\ldots,dx^{n-1}\right]$

PERIODICAL: Nauchnyye doklady vysshey shkoly. Fiziko-matematicheskiye nauki, 1958,Nr 6,pp 114-118 (USSR)

ABSTRACT: The geometry of the integral $\int F(x, y, y', y'')dx$ with respect to the group of tangential- and point transformations of the variables x,y was investigated by E. Cartan [Ref 1]. In the present paper the author investigates with the aid of the Cartan theory of infinite transformation groups the geometry of the (n-1)-fold integral

$$\int F\left(x^{\alpha}, x^{n}, \frac{\partial x^{n}}{\partial x^{\alpha}}, \frac{\partial^{2} x^{n}}{\partial x^{\alpha} \partial x^{\beta}}\right)\left[dx^{1},\ldots,dx^{n-1}\right]$$

which is extended over an arbitrary surface S_{n-1} : $x^{n} = \varphi(x^{\alpha})$

Card 1/2

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

68018
SOV/155-58-6-19/36

The Geometry of the Integral $\int F(x^{\alpha}, x^{n}, x^{n}_{\alpha}, x^{n}_{\alpha\beta}) [dx^{1}, \ldots, dx^{n-1}]$

of X_n, with respect to the group of the analytic transformations of the variables $x^1, x^2, \ldots, x^n$. The author applies the invariant method of G.F. Laptev and he uses some results of his preceding paper [Ref 4]. The classical results of Cartan are partially extended to the case considered; some new properties of the integral are proved.
There are 4 references, 3 of which are Soviet, and 1 French.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova (Moscow State University imeni M.V. Lomonosov)

SUBMITTED: November 20, 1958

Card 2/2

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

81691

16.2200 S/020/60/132/05/07/069

AUTHOR: Yevtushik, L. Ye.

TITLE: Lie Derivative and Differential Equations of the Field of a Geometric Object

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 132, No. 5, pp. 998-1001

TEXT: The paper is closely connected with the publications of B. L. Laptev (Ref. 1,2). A point of the representation space of a group is denoted as a geometric object. The author considers the group of analytic transformations of the n variables x^i. According to the method of continuations and envelopments (Ref. 1) the author adjoins invariantly fields of other objects to the field of a geometric object in the space of the supporting elements. He shows that a differential equation obtained from the finite field equations and the continuation and evelopment operations are sufficient to obtain automatically the Lie derivatives (Ref. 2) of arbitrary order of the geometric object of the considered and of the invariantly adjoint fields. Here the calculation of the Lie derivative is carried out in an arbitrary coordinate system. Two theorems are given.

Card 1/2

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

81691
S/020/60/132/05/07/069

Lie Derivative and Differential Equations of the Field of a Geometric Object

There are 2 Soviet references.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet imeni M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

PRESENTED: February 20, 1960, by P. S. Aleksandrov, Academician

SUBMITTED: February 16, 1960

Card 2/2

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

YEVTUSHIK, L. YE., CAND PHYS-MATH SCI, "GEOMETRY OF the INTEGRALS IN SPACE OF ELEMENTS OF SECOND ORDER." MOSCOW, 1961. (MOSCOW STATE PED INST IM V. I. LENIN). (KL, 3-61, 203).

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

YEVTUSHIK, L.Ye.

Construction of invariant forms and structural equations of infinite groups. Dokl. AN SSSR 146 no.1:20-21 S '62. (MIRA 15:9)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonsova. Predstavleno akademikom P.S. Aleksandrovym.

(Forms (Mathematics)) (Differential equations)
(Groups, Theory of)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

YEVTSIKHEVICH, V.N., kand.geograf.nauk

Water erosion within the Khabarovsk area. Amur. skor. no. 1:69-76 '59. (MIRA 14:2)

1. Deystvitel'nyy chlen Geograficheskogo obshchestva SSSR.
(Khabarovsk region--Erosion)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

YEVTUSHENKO, G.A.; GONCHAR, A.L.

Effect of gibberellin on the growth and development of tobacco plants in Kirghizistan. Bot. zhur. 45 no.12:1793-1802 D '60.
(MIRA 13:12)

1. Institut botaniki AN Kirgizskoy SSR i Frunzenskaya opytnaya tabachnaya stantsiya Vsesoyuznogo instituta tabachnoy i makhorochnoy promyshlennosti.
(Kirghizistan—Tobacco) (Gibberellins)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

ACCESSION NR: AP4029202 S/0226/64/000/002/0019/0021

AUTHOR: Buryakina, A. L.; Yevtushok, T. M.

TITLE: Investigation of the contact reaction of metal-like carbides with graphite at high temperatures in a vacuum

SOURCE: Poroshkovaya metallurgiya, no. 2, 1964, 19-21

TOPIC TAGS: graphite, contact reaction, carbon carbide, titanium carbide, zirconium carbide, niobium carbide, tantalum carbide, hafnium carbide, power metallurgy

ABSTRACT: The investigation of the behavior of high-melting compounds in contact with graphite at high temperatures has great significance, since the character of the reaction may serve as a criterion for the selection of design compositions in nuclear power and rocket technology. The author studied the reaction of titanium, zirconium, hafnium, niobium, tantalum, molybdenum, and tungsten carbides with graphite in the temperature range of 1800-2200C for a contact time of up to 10 hours. The following observations were made: 1) the weight of carbide samples after annealing in a graphite covering was maintained to an accuracy of several hundredths of a percent; 2) no traces of the reaction were revealed in the metallographic investigation on the graphite-carbide contact boundary; 3) the

Card 1/2

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

ACCESSION NR: AP4029202

microhardness of the carbide samples in graphite after contact near the boundary was maintained within the limits of measurement error; and 4) the results of the chemical analysis confirm the absence of a graphite reaction with any of the carbides. This last observation agrees with bibliographic data, where the melting temperature of the eutectics of pseudobinary systems has been established. 3080 (±50) C for TiC-C, 2920 (±50) C for ZrC-C, 3150 (±50) C for NbC-C, 3310 (±50) C for TaC-C, and 3250 (±50) C for HfC-C. Orig. art. has: 2 figures.

ASSOCIATION: Institut problem materialovedeniya AN SSSR (Institute of Material Behavior Problems, AN SSSR)

SUBMITTED: 08Jan63 DATE ACQ: 28Apr64 ENCL: 00

SUB CODE: ML NO REF SOV: 002 OTHER: 000

Card 2/2

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

EWG(j)/EWP(e)/EPA(s)-2/EWT(m)/EPF(c)/EWP(i)/EPF(n)-2/EWG(m)/EWA(d)/
EPA(w)-2/EWP(t)/EWP(b)

ACCESSION NR: AP5018938

UR/0363/65/001/006/0996/0998
621.785.53

AUTHOR: [illegible], A. [illegible], Yevtush [illegible]

TITLE: Niobium carbide and boron carbonitride coatings on graphite

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. [illegible], and insert facing the page [illegible]

TOPIC TAGS: graphite, graphite coating, oxidation inhibiting coating, [illegible] bide coating, boron carbonitride coating [illegible]

ABSTRACT: Conditions of coating graphite with niobium carbide or boron carbonitride have been investigated. In the first case, graphite plates 2[illegible] x [illegible] x [illegible] mm were packed in niobium powder, [illegible] above the [illegible] melting point, and held for [illegible] min. The molten metal [illegible] [illegible] temperature, niobium carbide was formed. The obtained deposit prior to annealing was found to have two phases: the Nb_2C with a microhardness of 2263 kg/mm^2 and the solid solution of carbon in niobium with a microhardness of 282 kg/mm^2. Diffusion

Card 1/2

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

[illegible]

annealing at 1700—1900C converted the solid solution into carbide, but a [illegible]

[illegible]

ASSOCIATION: Institut problem materialovedeniya [illegible]

SUBMITTED: 03Jun64 ENCL: 00 SUB CODE: MTMM

NO REF SOV: 003 OTHER: 000 ATD PRESS: 4068

Card 2/2

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

BURYKINA, A.L.; YEVTUSHOK, T.M.

Investigating the contact interaction of metallic borides with graphite at high temperatures in vacuum. Porosh.met. 5 no.6:75-78 Je '65. (MIRA 18:8)

1. Institut problem materialovedeniya AN UkrSSR.

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

SOURCE CODE: UR/0226/65/000/012/0039/0044

AUTHOR: Burykina, A. L.; Krasnov, A. N.; Yevtushok, T. M.

ORG: Institute of the Problems of the Science of Materials AN UkrSSR (Institute materialovedeniya AN UkrSSR)

TITLE: Plasma-sprayed diffusion coatings on graphite

SOURCE: Poroshkovaya metallurgiya, no. 12, 1965, 39-44

TOPIC TAGS: graphite, metal coating, plasma sprayed coating, diffusion coating, copper coating, aluminum coating, niobium coating, tungsten coating

ABSTRACT: Plasma coating of graphite with copper, aluminum, Nichrome, molybdenum, tungsten, and silicon by spraying or vacuum diffusion has been investigated and

by plasma arc spraying. Diffusion coatings were produced by pack cementation in a vacuum of 0.133—0.0133 n/m² at a temperature 50—100C higher than the melting temperature of the metal and holding time of 5—7 min. The densest, most strongly adhering coatings were obtained on the least porous graphite. After annealing at

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

L 11624-66

ACC NR: AP6001472

titanium carbide containing about [illegible] and an external layer [illegible] solid [illegible] external layer was transformed [illegible] increasing annealing time to [illegible] [illegible] thick, obtained by cementation at [illegible] transformed into a single phase zirconium-carbide [illegible] [illegible] obtained by cementation for 1.5 hr in a hydrogen atmosphere at 1600C followed by annealing at [illegible] or 2300C (to transform [illegible] [illegible] coatings on [illegible] had a microhardness of [illegible] [illegible] graphite after [illegible] annealed at 2300C were [illegible] and 3 tables. [illegible]

[illegible] SUBM DATE: 29Mar65/ ORIG REF: 003/ OTH REF: 002 ATD PRESS:

4177

Card 2/2

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

(A) L 11907-66 [illegible]

[illegible]

[illegible] Yevtushok, [illegible]

[illegible]

TITLE: Aluminum nitride coatings on graphite

SOURCE: Teplofizika vysokikh temperatur, v.3, no.6, 1965, 940-942

TOPIC TAGS: metal coating, aluminum nitride, graphite

ABSTRACT: The article studies the possibility of obtaining aluminum nitride coatings on graphite by the method of flame spraying of the aluminum with subsequent nitri[illegible] [illegible] strength, the size of the arc [illegible] parameters were found to be optimum:

Card 1/2

UDC: 546.171:546.621

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

L 11907-66

[illegible] volts/current [illegible] are [illegible]

[illegible] furnace at a temperature of 500°C, and the maximum nitriding temperature [illegible]

[illegible] in the carrying out of our work." Orig. art. has [illegible] figures and 1 table.

SUB CODE: 20,11/ SUBM DATE: 15Jan65/ ORIG REF: 002/ OTH REF; 004

Card 2/2

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

YEVTUTOV, A.A.

137-58-5-9275

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 5, p 71 (USSR)

AUTHORS: Yevtutov, A.A., Chemodanov, V.S.

TITLE: Improvements in Production Technology of Alumina at the Ural Aluminum Plant (Usovershenstvovaniye v proizvodstve glinozema na Ural'skom alyuminiyevom zavode)

PERIODICAL: Byul. tsvetn. metallurgii, 1957, Nr 8, pp 56-59

ABSTRACT: An enumeration of improvements in technology and equipment for production of Al_2O_3 at the Ural aluminum plant.

G.S.

1. Aluminum oxides--Production 2. Industrial plants--Equipment

Card 1/1

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

YEVTYANOV, S. I.

PA 19T6

USSR/Equations, Electromagnetic Apr 1946
Mathematics, Applied

"Relation Between Symbolic and Approximation Equations," S. I. Yevtyanov, Candidate of Mech Sci, 12 pp

"Radiotekhnika" Vol I, No 1

The author describes a regular method for obtaining approximation van der Pol equations in relation to complex slowly-changing amplitudes directly from symbolic equations for oscillating systems approaching conservative linear types. A few typical examples for self-oscillating circuits are considered.

19T6

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

YEVTYANOV, S. I. PA 1977

USSR/Calibrators, Frequency May 1946
Frequency measurements

"Calculation of Frequency for Self-excited Oscillations," S. I. Yevtyanov, Candidate of Mech Sci, 11 pp

"Radiotekhnika" Vol I, No 2

General equations are derived for various self-oscillatory circuits in which the grid current is taken into account, utilizing the operator method. It is established that any self-oscillatory circuit may be characterized by three parameters: the anode current impedance, the coefficient of transformation, and the short circuit impedance, and that these parameters may be determined for any circuit.

1977

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

YEVTYANOV, S. I.

PA 19T24

USSR/Transient Electrical Phenomena Aug 1946
Mathematics, Applied

"Transients in Selective Circuits," S. I. Yevtyanov, Candidate of Mech Sci, 9 pp

"Radiotekhnika" Vol I, No 5

Operator calculus, van der Pol's method of gradually varying amplitudes, and the results of the author's previous work permit a mathematical procedure to be developed which allows a direct computation of transient complex amplitudes for selective four-terminal networks.

19T24

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

YEVTYANOV, S. I.

YEVTYANOV, S. I.

Yevtyanov, S. I. defended his Doctor's dissertation in the Moscow Power Engineering Institute im Molotov, USSR, on 14 November 1947, for the academic degree of Doctor of Technical Sciences.

Dissertation: "Transient Processes in Radio-Frequency Amplifiers".
Resume: Yevtyanov studied processes in linear selective four-terminal networks, to which class belong rf and if amplifiers in radio receivers and transmitters. Using the van der Pol method and classical procedures of operational calculation, he developed a special apparatus for calculating slowly changing envelopes at the output of selective four-terminal networks. On the basis of the general method he studied transient processes in different rf-amplifier circuits resulting from switching dc and harmonic voltages on and off at the input as well as from rapid phase and frequency variations.

Official Opponents: Profs. A. N. Shchukin (Corrsp. Mbr. Academy of Sciences USSR); L. Ya. Zhekulin and V. A. Kotel'nikov (Doctors of Technical Sciences).

SO: Elektrichestvo, No. 7, Moscow, August 1953, pp 87-92 (W/29844, 16 Apr 54)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

YEVTIANOV, S. I.

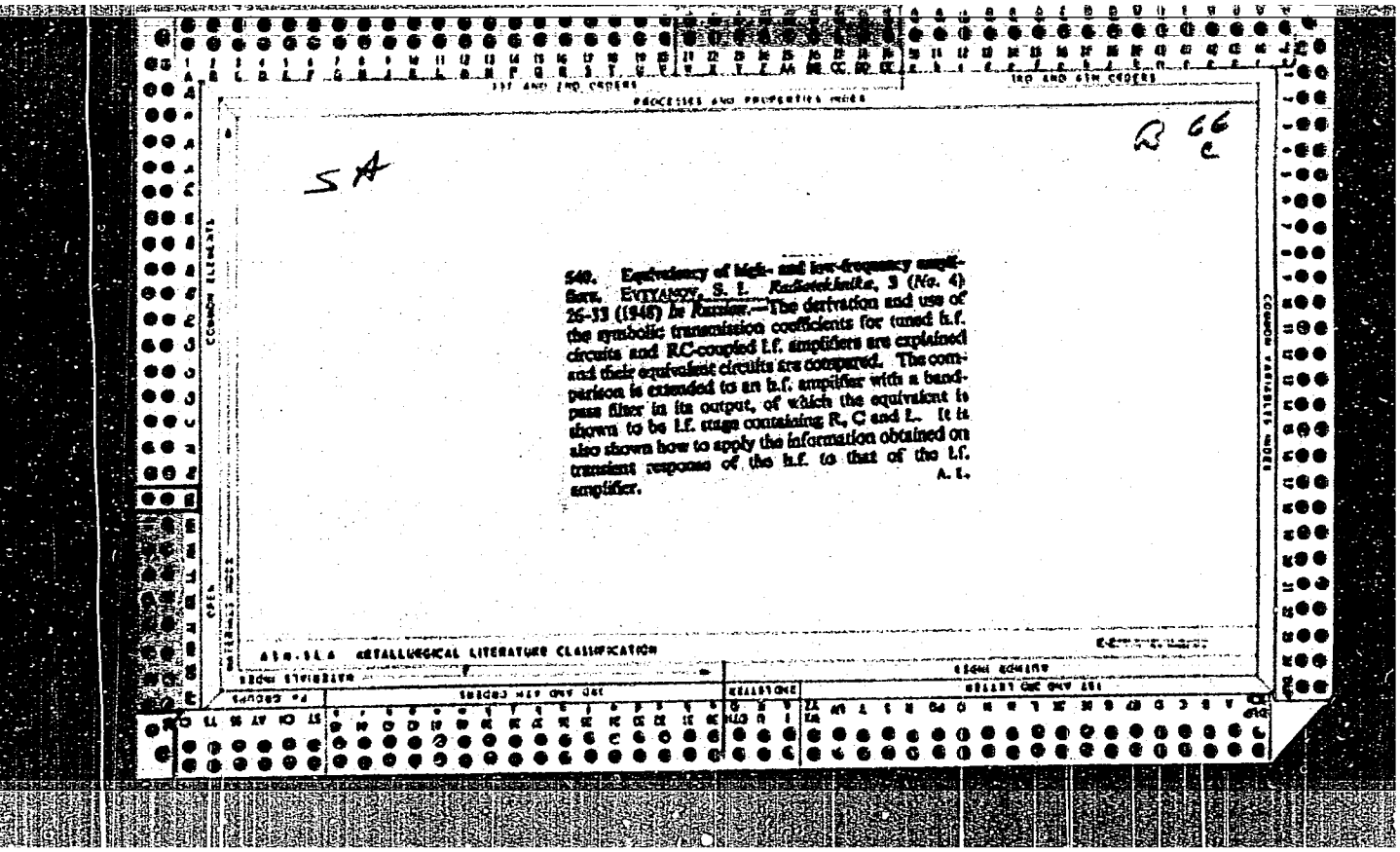
Perekhodnye protsessy v priemno -usilitel'nykh skhemakh. [Transient phenoma in receiving amplifying circuits]. Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio. 1948. 209. p. diagrs.
Bibliography: p. 206- [207]. DLC: TK6552.E9

Radioperedaiushchie ustroistva. [Working principles of radio transmitters]. Dopushcheno v kachestve uchebnika dlia energ. i elektrotekhn. vuzov. Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio, 1950. 643 p. diagrs.
Includes bibliographies DLC: TK6561.E86

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress, Reference department, Washington, 1951, Unclassified.

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4



540. Equivalency of high- and low-frequency amplifiers. EVTIANOV, S. I. *Radiotekhnika*, 3 (*No.* 4) 26-33 (1948) *In Russian.*—The derivation and use of the symbolic transmission coefficients for tuned h.f. circuits and RC-coupled l.f. amplifiers are explained and their equivalent circuits are compared. The comparison is extended to an h.f. amplifier with a band-pass filter in its output, of which the equivalent is shown to be l.f. stage containing R, C and L. It is also shown how to apply the information obtained on transient response of the h.f. to that of the l.f. amplifier. A. I.

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

PA 36/49T105

USSR/Radio
Oscillators, Crystal
Mathematics - Applied

Jan/Feb 49

"Theory of a Quartz Oscillator," S. I. Yevtyanov, Ur Tech Sci, 13 pp

"Radiotekh" Vol IV, No 1

Discusses theory of an oscillator with quartz crystal included between grid and cathode on the basis of simplified symbolic equations developed by author. Obtained condition for self-excitation, expression for frequency correction, and equation for amplitude of self-excitation for fixed operation. Investigated frequency stability during fixed

36/49T105

USSR/Radio (Contd) Jan/Feb 49

operation. Noted phenomena of oscillation hysteresis under changing conditions in the plate circuit. Submitted 7 Apr 48.

36/49T105

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

YEVTYANOV, S. I., PROF.

USSR/Electronics - Oscillators, Sep/Oct 49
Crystal-Controlled

"Theory of a Quartz Oscillator (II)," Prof S. I. Yevtyanov, Dr Tech Sci

"Radiotekh" Vol IV, No 5, pp 71-78

Establishes analogy between condensed eqs for oscillators with the quartz placed between (1) grid and cathode and (2) grid and plate. On the basis of this analogy, the theory worked out for circuit (1) in a previous work (36/49T105) is used for constructing the theory of circuit (2). Submitted 10 Jul 48.

206T58

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

YEVTYANOV, S.I.

PHASE I TREASURE ISLAND BIBLIOGRAPHICAL REPORT AID 389 - I

Call No.: AF545388

BOOK

Author: YEVTYANOV, S. I.
Full Title: RADIO TRANSMITTING EQUIPMENT
Transliterated Title: Radioperedayushchiye ustroystva

Publishing Data

Originating Agency: None
Publishing House: State Publishing House for Literature on Problems of Communications and Radio
No. pp.: 643 No. of copies: 15,000
Date: 1950

Editorial Staff

Editor: Lebedev, V. L Tech. Ed.: None
Editor-in-Chief: None Appraiser: None
Others: Critical suggestions were offered by M. S. Neyman, B. P. Perent'yev, Yu. B. Kobzarev, I. Kh. Nevyazhskiy, Ye. R. Gal'perin, N. I. Shteyn, A. F. Bogomolov, B. P. Godelevich, L. A. Korneyev, and N. Ya. Matyukhin

Text Data

Coverage: This book deals with a detailed theory of radio transmitting installations. Following the treatment of basic relationships and components, the text devotes considerable space to AM, FM, telegraphy, and pulse transmission. Thus, the last 3 chapters are devoted to microwaves and, in particular, to the treatment of klystrons and magnetrons.

1/3

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

The approach is theoretical with a great deal of mathematical analysis. The design and construction of radio transmitting equipment is not investigated. The book was specifically written to be used in conjunction with the course "Radio Transmitting Equipment" taught at the Moscow Institute of Energetics im. V. M. Molotov.

TABLE OF CONTENTS

Ch. 1. Introduction
" 2. Static Characteristics and Optimum Specifications of Oscillator Tubes
" 3. General Data on Externally Excited Oscillators
" 4. Analysis of Externally Excited Oscillators
" 5. Computation of Grid Circuits
" 6. Oscillating Circuits of Oscillator Tubes
" 7. Operation of Externally Excited Oscillator as a Function of Load and Supply Voltage
" 8. Circuits of Externally Excited Oscillators
" 9. Utilization of Higher Harmonics
" 10. Feedback Oscillators
" 11. VHF Feedback Oscillators
" 12. Frequency Stabilization of a Feedback Oscillator
" 13. Frequency Stabilization of Quartz-Stabilized Feedback Oscillator
" 14. Neutralization

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

Radioperedayushchiye ustroystva AID 389 - I

Ch. 15. Parasitic Oscillations
" 16. Amplitude Modulation
" 17. Single-Band Transmission
" 18. Frequency Modulation
" 19. Telegraphy
" 20. Pulse Modulation
" 21. Pulse Transmitter Operation
" 22. Klystrons
" 23. Magnetrons

Purpose: Intended as a textbook for electrical engineering in the Institute of Energetics.

Facilities: None

No. of Russian and Slavic References: A bibliographical list is included at the end of each chapter. Most of the reference books are of Soviet origin.

Available: A.I.D., Library of Congress

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

YEVTYANOV, S. I. and Ye. R. GAL'PERIN

Exercise Book for Formulae Used in the Construction of Radio Transmitters, State Publishing House on Questions Pertaining to Communications and Radio, Moscow, 1951.

Book-CSI-G-EG-1205

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

ЕВТЯНОВ, С. И.

EVTYANOV, S. I.

Radioperedaiushchie ustroistva. Dopushcheno v kachestve uchebnika dlia energ. i elektrotekhn. vuzov. Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio, 1950. 643 p., diagrs.

Includes bibliographies.

Title tr.: Radio transmitting devices. Approved as a textbook for schools of advanced studies in power and electric engineering.

Reviewed by S. S. Arshinov in Sovetskaia kniga, 1951, no. 9, p. 51-54.

TK6561.E86

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress, 1955.

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

GAL'PERIN, Ye.R., redaktor; GODELEVICH, V.P.; YEVTYANOV, S.I., redaktor; KRISS, P.Zh.; KUNINA, S.L.; POPOV, I.A.; SHTEYN, B.B., redaktor; VOLKOVA, T.V., redaktor; VEYSTRAUB, L.B., tekhnicheskiy redaktor.

[Problems on radiobroadcasting installations] Zadachnik po radioperedaiushchim ustroistvam. Pod red. S.I.Evtianova i E.R.Gal'perina. Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio, 1951. 175 p. [Microfilm] (MLRA 7:12)

(Radio--Problems, exercises, etc.)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

YEVTYANOV, S. I.

Radiophysics, Generation and Conversion of RF Oscillations
Radiotekhnika, Vol 7, No 6, 1952. "Study of Two Quartz Self-Excited Oscillator Circuits."

No abstract.

SO: Radiotekhnika, Vol 9, No 2, Mar/Apr 54;(W-30785, 28 July 1954)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

USSR/Electronics YEVTYANOV, S. I.

FD 230

Card 1/1

Author : Yevtyanov, S. I., Kamenskiy, Ye. I., and Yesin, V. A.

Title : Investigation of a quartz self-excited oscillator according to the Shembel' circuit

Periodical : Radiotekhnika 9, 36-46, Mar/Apr, 1954

Abstract : Presents methods for calculating a quartz self-excited oscillator according to the Shembel' circuit and methods for analyzing a self-excited oscillator at a partially linear idealization of static characteristics of vacuum tubes. Comparison is made of results derived by calculation and experimentation. Appearance of oscillatory hysteresis was discovered. Four references: 3 USSR., 1 USA.

Institution :

Submitted : December 6, 1952

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

YEVTYANOV, S.I.

Perekhodnye protsessy v priemno-usilitel'nykh skhemakh. Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio, 1948. 209 p., diagrs.
Bibliography: p. 206-207.
Title tr.: Transient processes in receiveramplifier circuits.

TK6552.E9

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress, 1955.

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

YEVTYANOV, S.I.

YEVTYANOV, S.I.

Radioperedaiushchie ustroistva. Dopushcheno v kachestve uchebnika dia energ. i elektrotekhn. vuzov. Moskva, Gos, izd-vo lit-ry po voprosam sviazi i radio, 1950. 643 p., diagrs.

Includes bibliographies.

Title tr.: Radio Transmitting devices. Approved as a textbook for schools of advanced studies in power and electrical engineering.

Reviewed by S.S. Arshinov in Sovetskaia kniga, 1951, no. 9, p. 51-54.

TK6561.E86

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress, 1955.

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

YEVTYANOV, S.I.

CIRCUITS

"Design of Generator in Overdriven Mode" by S. I. Yevtyanov, Elektrosvyaz', No 11, November 1957, pp 52-58.

In the design of a generator in overdriven mode it becomes necessary to use coefficients of expansion for small cutoff angles Θ. The article obtains series for the expansion coefficients, in powers of $(1 - \cos \theta)$. These series have good convergence at small cutoff angles. They permit preparation of convenient tables for the coefficients of expansion not of Θ, but of $\cos \Theta$. It is also possible to carry out harmonic analysis of pulses of the plate current in the overdriven mode, seldom resorting to the tables of the expansion coefficients.

Card: 1/1

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

AID P - 4528

Subject : USSR/Electronics

Card 1/2 Pub. 90 - 1/10

Author : Yevtyanov, S. I.

Title : The power-balance method of constructing simplified equations.

Periodical : Radiotekhnika, 2, 3-13, F 1956

Abstract : The author presents in three examples the construction of simplified equations by the power-balance method. He develops these equations for a single-circuit self-excited oscillator with nearly sinusoidal oscillations, and for two cases of double-circuit self-excited oscillators with a transformer feedback, one with a weak and another with a strong coupling between the circuits. The method presented is based on the theory of non-linear differential equations of the vander Pol type as developed further in the works of L. I. Mandel'shtam and N. D. Papaleksi, N. M. Krylov and I. I. Bogoliubov,

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

AID P - 4528

Radiotekhnika, 2, 3-13, F 1956

Card 2/2 Pub. 90 - 1/10

Yu. B. Kobzarev, K. F. Teodorchik and the author. Four diagrams, 9 references (1934-1952) (7 Soviet).

Institution : None

Submitted : S 1, 1955

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

YEVTYANOV, S.I.

"The Harmonic Analysis of Nonsymmetrical Pulses," by S. I. Yevtyanov, Elektrosvyaz', No 4, Apr 56, pp 17-27

Formulas were derived for the calculation of the nonsymmetrical pulse harmonics of an anode current obtained during the operation of a tube oscillator with a complex load.

The work, announced at a conference of the Scientific Technical Society of Radio Engineering and Electrical Communications held on 15 March 1956, was a continuation of a former work by the same author published in Radioperedayushchiye Ustroystva (Radio Transmitting Devices), Voyenizdat, 1950.

Sum 1219

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

Subject : USSR/Electronics AID P - 4907

Card 1/2 Pub. 90 - 1/10

Author : Yevtyanov, S. I.

Title : Effects of an outside input upon a self-excited oscillator.

Periodical : Radiotekhnika, 6, 3-12, Je 1956

Abstract : The author explains the principles on which he based his engineering method of computing self-excited oscillators operating with an external input. This results in asynchronous damping and asynchronous excitation. The author suggests that the computing be done in two steps. The first step is to compute and build modulation characteristics. He investigates these by approximating certain nonlinear functions by polynomials. In the second step he finds from these characteristics the harmonics of the anode current. The method of modulation characteristics is based on the apparatus of Fourier

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

AID P - 4907

Radiotekhnika, 6, 3-12, Je 1956

Card 2/2 Pub. 90 - 1/10

transform pairs. The author investigates some details of computation under asynchronous and synchronous operating conditions. Three diagrams, 8 soviet references (1933-1954).

Institution : None

Submitted : Ag 11, 1955

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

YEVTYANOV, S.I.

SUBJECT USSR / PHYSICS CARD 1 / 2 PA - 1340
AUTHOR EVTJANOV, S.I.
TITLE On the Action brought to Bear from Outside on an Autogenerator.
PERIODICAL Radiotechnika, 11, fasc. 6, 3-12 (1956)
Issued: 7. / 1956 reviewed: 10 / 1956

The here investigated technical computation is in no connection with the approximation by polynomials of the anode current and makes it possible to take "self-shift" into account. The method of modulation characteristics, which is based upon using two Fourier series, is newly introduced. Here some details of the computations for asynchronous and synchronous operation are discussed. The main difficulty consists in the harmonic analysis of the anode- or grid currents on the occasion of the action of a sum of voltages upon the grid. Here it is necessary to distinguish between two possible modes of operation: Synchronous operation and asynchronous operation; the frequencies of action from without and of the self-oscillations are in a simple (or no) ratio. The method of modulation characteristics used here for the purpose of solving this problem is above all used in the theory of amplitude modulation. The frequency of action brought to bear from without is considered as carrier frequency, and the frequency of self-oscillations as a modulation frequency. When investigating the modulation process such modulation frequencies should be used as represent the dependence of the amplitude of each harmonic on the shift voltage. On this occasion a spectrum is formed from which it is possible to select the components with the necessary frequencies. For this reason such an autogenerator with action from without is best

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4

computed in two stages: At first the modulation characteristics are computed and plotted (they may e.g. be approximated by a polygonal course). With their aid the necessary harmonics of the anode current are then determined. This method functions also if the voltages of the exterior force and of the back-coupling act upon different grids of a multi-grid tube. It may also be used for the computation of an autogenerator with two degrees of freedom without exterior action.

Asynchronous operation: If the working point is chosen to be to the right of the locking point, and if self-oscillations occurred in the free autogenerator, the conditions of self-excitation may be eliminated by switching on exterior action. This may cause an asynchronous-like dying-down of oscillations. If, however, the working point is to the left of the locking point, a synchronous-like excitation of self-oscillations may occur in the case of an action from without.

Synchronous operation: The frequencies of the action brought to bear from without and of the self-oscillations should be in the ratio m : n. If the self-oscillations in the case of asynchronous operation are suppressed there is no self-excitation of self-oscillations also within the domain of synchronism.

INSTITUTION:

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R001963020015-4"