L 00931-66
ACCESSION NR: AP5021709 0

graph which shows that a significant reduction in the drag is obtained with a star-like body. Orig. art. has: 9 figures and 16 formulas. [AB]

ASSOCIATION: none

SUBMITTED: 20Nov64 ENCL: 00 SUB CODE: ME

NO REF SOV: 002 OTHER: 003 ATD PRESS: 4077

Card 2/2 DP

L 11265-65 EWT(1)/EWP(m)/EWA(d)/ECS(k)/EWA(l)
ACC NR: AP6002367 SOURCE CODE: UR/0207/65/000/006/0122/0125

63
B

AUTHOR: Gonor, A. L. (Moscow); Shvets, A. I. (Moscow)

ORG: none

TITLE: An investigation of pressure distribution on certain starlike bodies at nearly 4 M

SOURCE: Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki, no. 6, 1965, 122-125

TOPIC TAGS: aerodynamics, supersonic flow, shock tube, angle of attack, pressure distribution, wave drag, aerodynamic boundary layer, shock wave

ABSTRACT: The results of an experimental investigation of pressure distribution on star-like bodies (see Fig. 1) in supersonic flows in an aerodynamic wind tunnel at $M = 3.85 \pm 0.1$ and $Re = 6.0 \times 10^6$ are presented. The models, experimental setup, and measuring techniques are described in detail. Pressure measurements were obtained by manometers with tetrabromoethane liquid (density = 2.96 g/cm^3). The boundary layer effect upon the flow structure for various angles between wings is investigated and shock wave structures for various angles of attack (from 5 to 15°) are analyzed. A comparison of the experimental results with the exact theoretical data obtained previously by the author shows good agreement for all models. The ratios between the wave drags of equivalent circular cones and wave drags of models calculated from

Card 1/2

L 11265-66

ACC NR: AP6002367

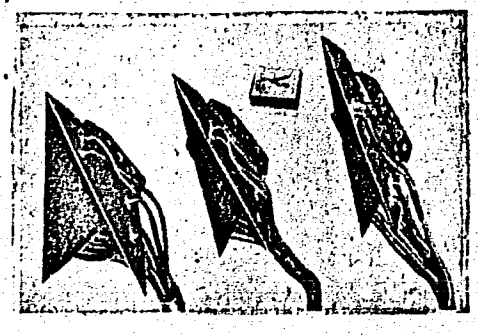


Fig. 1. Star-shaped models

experimental data indicate that in certain cases predicted by theory the wave drag is reduced several times. [AB]

SUB CODE: 20 / SUBM DATE: 25Jul65/ ATD PRESS: 4171

Card 2/2

L 31822-66 EWT(d)/EWT(l)/EWP(m)/EWT(m)/EWP(w)/EWP(k) WW/EM

ACC NR: AP6020729 SOURCE CODE: UR/0421/66/000/003/0098/0102

83
82
B

AUTHOR: Gonor, A. L. (Moscow); Shvets, A. I. (Moscow)

ORG: none

TITLE: Investigation of the shock wave system in supersonic flows around star-shaped bodies

SOURCE: AN SSSR. Izvestiya. Mekhanika zhidkosti i gaza, no. 3, 1966, 98-102

TOPIC TAGS: supersonic aerodynamics, aerospace structure, pressure distribution, wind tunnel, attached shock wave, reflected shock wave, flow structure

ABSTRACT: The results of an experimental investigation of the flow structure around bodies with star-shaped cross sections in supersonic

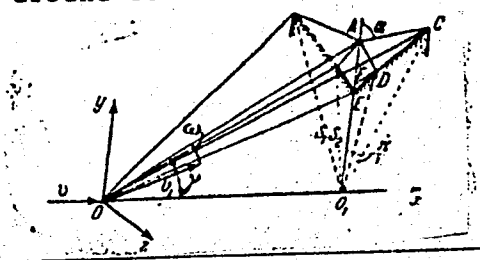


Fig. 1. Flow field and model.

Card 1/3

flows by means of an optical method are presented. The shapes of the bodies were taken from data obtained by one of the authors (Prikladnaya matematika i mekhanika, v. 28, no. 5, 1964 (Fig. 1)). The experiments were carried out in an aerodynamic wind tunnel at M = 2.85 ± 0.1 and angles of attack from 0 to 15°. Assuming that a shock wave is attached to the ribs of bodies symmetrically located with respect to the axis, flows over star-shaped bodies are studied on a model formed by two

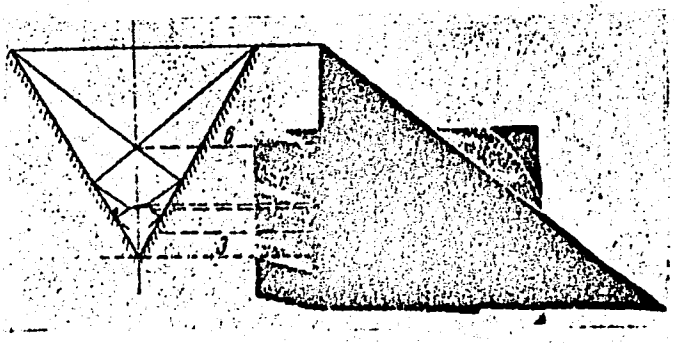


Fig. 2. Shadowgraph of model and shock wave system.

half-ribs which represents a V-shaped wing. The experimental set-up and procedure are described. Three models of V-shaped wings were

L 31822-66

ACC NR: AP6020729

investigated at angles of roll ϕ = 0, 10, 15, 30, and 45° in order to obtain a three-dimensional flow structure. The results presented in schlieren photographs, charts, and graphs are discussed; an analysis of this material shows that the deviation of the Mach number from its theoretical value, the effects of viscosity, inaccuracy of the models, and the presence of a small angle of attack lead to realization of a flow pattern which is formed by a system of intersecting and reflected shock waves (Fig. 2). Good agreement was found between theory and experiment on pressure distribution. Orig. art. has: 8 figures and 6 formulas. [AB]

SUB CODE: 20/ SUBM DATE: 09Jun65/ ORIG REF: 006/ OTH REF: 001/
ATD PRESS: 5020

Card 3/3

87432
S/191/60/000/010/004/017
B004/B060

158110

AUTHORS: Skrylova, L. V., Molotkov, R. V., Gonor, E. S., Kazanskaya, V. F., Gvirts, E. M.

TITLE: Polyglycidyl Cyanurates as Heat-resistant Epoxy Resins

PERIODICAL: Plasticheskiye massy, 1960, No. 10, pp. 13-14

TEXT: The authors based on the U.S. Patent No. 2,809,942 to synthesize an epoxy resin from cyanuric acid and epichloro hydrin (ЭЦ (ETs-Resin)). [Abstracter's Note: The synthesis is not described]. Number of epoxy groups (29-32%), content of inorganically bound chlorine (0.04-0.06%), and content of organically bound chlorine (5-6%) were determined. ETs resin was polymerized either with maleic anhydride or phthalic anhydride. Its thermomechanical properties were examined and compared with those of ЭД-6 (ED-6) resin (a dian resin). A better heat resistance (up to 170-175°C) and a smaller dielectricity loss were established at high temperatures, as compared with ED-6. There are 2 figures and 3 non-Soviet references.

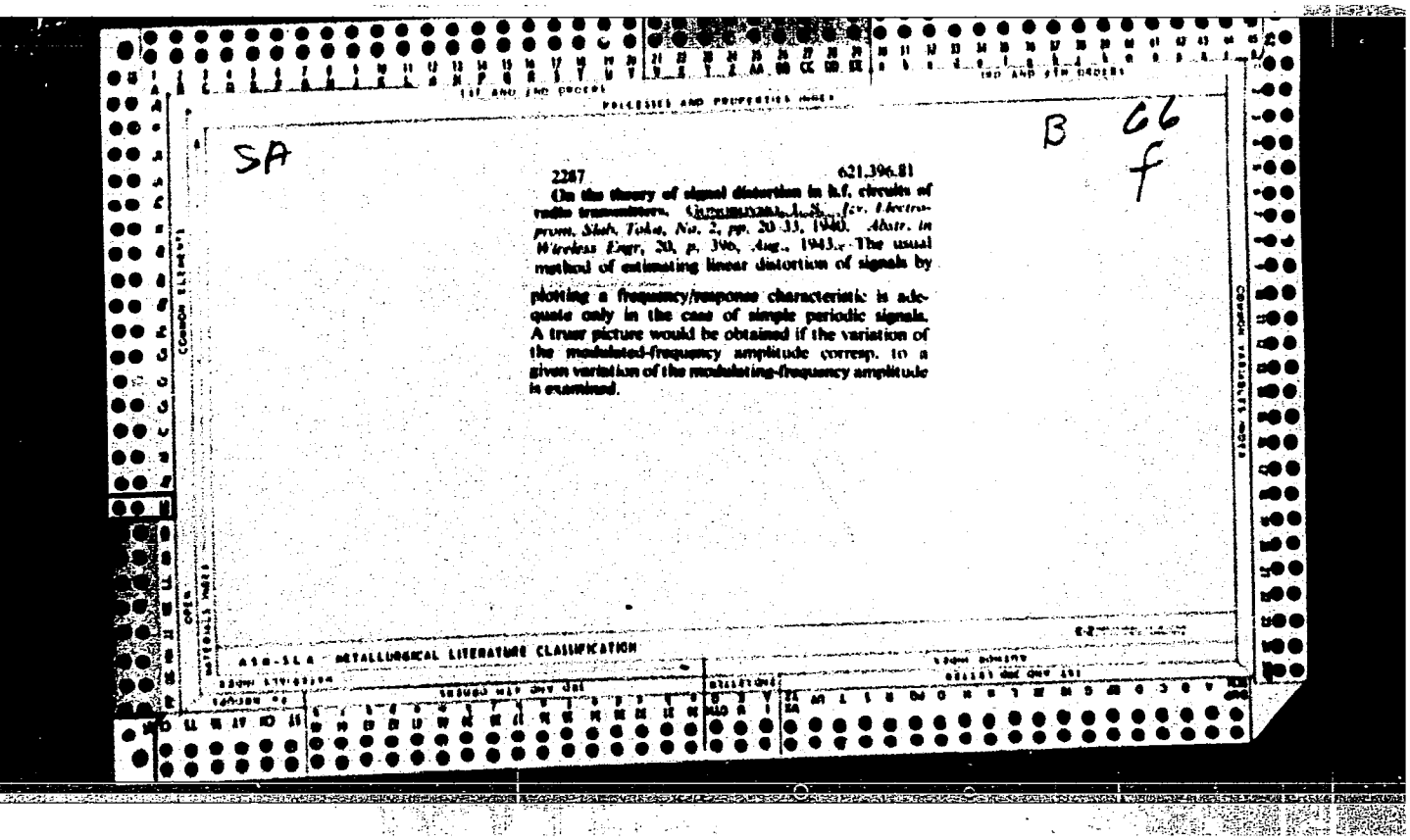
Card 1/1

KOTLYAR, P.S., inzh.; GONOR, V.B., inzh.

Water conditions of low-capacity steam boilers. Bezop. truda v prom. 6 no.8:13-15 Ag '62. (MIRA 16:4)

1. Upravleniye Kiyevskogo okruga Gosudarstvennogo komiteta pri Sovete Ministrov UkrSSR po nadzoru za bezopasnym vedeniyem rabot v promyshlennosti i gornomu nadzoru.

(Boilers)



SA

B 66 f

2287 621.396.81

(On the theory of signal distortion in h.f. circuits of radio transmitters. [illegible] *Sov. Electrosvyaz, Sibir, Tekn., No. 2*, pp. 20-33, 1940. *Abstr. in Wireless Engr*, 20, p. 396, Aug., 1943.) The usual method of estimating linear distortion of signals by plotting a frequency/response characteristic is adequate only in the case of simple periodic signals. A truer picture would be obtained if the variation of the modulated-frequency amplitude corresp. to a given variation of the modulating-frequency amplitude is examined.

ASD-SLA METALLURGICAL LITERATURE CLASSIFICATION

PA 20T78

GONOROVSKIY, I. S.

USSR/Radio, Frequency Modulation - Apr 1946
Transmission
Radio, Frequency Modulation - Reception

"Broadcasting on FM," I. S. Gonorovskiy, Dr of Mechanical Sciences, 1 p

"Radio" No 1

Short description of FM and the principle on which it works and the purpose for which it is best adopted, i.e., ultra short-wave transmission to eliminate various static conditions caused by metropolitan traffic and industry. In the near future reception will be on 40 to 50 megacycles. Rosenfel'd Ganin, and Margolin are some of the scientists associated with the development of FM transmissions.
20T78

GONOROVSKIY, I. S.

PA 19T2

USSR/Transient Electrical Phenomena Apr 1946
Radio, Frequency modulation

"Transient Phenomena in FM Linear Systems," Prof I. S. Gonorovskiy, Dr of Mech Sci, 14 pp

"Radiotekhnika" Vol I, No 1

Theory of transient phenomena in FM systems with instantaneously changing frequency applied to the input of the equipment. Consideration of steady state processes for single tuned circuits and band-pass filters, and relations between band with and steady state time.

19T2

W.E. Transmission

621.396.619.13 2400

Frequency Modulators with Reactance Valves.—I. S. Gonorovski. (*Radiotekhnika, Moscow*, May/June 1947, Vol. 2, No. 6, pp. 3-18. In Russian, with English summary.) Design theory is given for a modulator using a reactance valve for frequency control of a self-oscillator. Parasitic a.m. is considered and various methods of coupling the reactance valve to the oscillator are investigated. Tests on an experimental 1-kW f.m. c.w. broadcast transmitter at Moscow are discussed.

1948

GONOROVSKIY, I. S.

"On the Theory of Determining Processes in Selective Systems," Radiotekhnika, 7, No.1, 1952

GONOROVSKIY, I.S., doktor tekhn. nauk.

Effect of complex electromotive forces on linear systems. Radiotekhnika 8 no.1:3-15 Ja-F '53. (MLRA 11:6)
(Pulse techniques (Electronics)) (Radio circuits)

GONOROVSKIY, I.S.

[Radio signals and fringe phenomena in radio circuits] Radiosignaly i perekhodnye iavleniia v radiotsepiakh. Moskva, Svias'izdat, 1954. 326 p. (MLRA 7:11D)

GONOROVSKII, I. S.

USSR/Electronics

Card 1/1

Author : Gonorovskiy, I. S., Active Member, VNORiE

Title : The relation between frequency and phase characteristics in linear circuits

Periodical : Radiotekhnika 9, 11-18, Jan-Feb 1954

Abstract : Considers interrelations between frequency and phase characteristics and their influence on transient processes. Discusses conditions for which the sign of derivative of the phase characteristic can be varied; and shows that, in the passband of any four-terminal network, this characteristic has a negative derivative. A positive derivative is possible only in a delay band. Four references: 3 USSR

Institution : All-Union Scientific and Technical Society of Radio Engineering and Electric Communications imeni A. S. Popov (VNORiE)

Submitted : November 14, 1952

GONOROVSKIY, I. S.

V
(1)

The Fluctuating Character of the Establishment of Oscillations in an Oscillator.—I. S. Gonorovski. (*C. R. Acad. Sci. U.R.S.S.*, 11th Feb. 1954, Vol. 94, No. 5, pp. 869–872. In Russian.) The build-up of oscillations in an *LCR*-oscillator by white-noise potential fluctuations is considered theoretically.

10-14-54 Ps

Gonorovskiy, I. S.

USSR/ Electronics - Tube generators

Card 1/1 Pub. 22 - 19/52

Authors : Gonorovskiy, I. S.

Title : On phase fluctuations in a tube generator (oscillator)

Periodical : Dok. AN SSSR 101/4, 657-660, Apr 1, 1955

Abstract : A simple analytical method of determining the shot effect on the tube generator (oscillator) is presented. Six USSR references (1941-1954). Diagram; graph.

Institution : .....

Presented by: Academician M. A. Leontovich, September 25, 1954

GONOROVSKIY, Iosif Semenovich; IVANOV-TSYGANOV, A.I., redaktor; LEDNEVA, N.V., tekhnicheskiy redaktor

[Fundamentals of radio engineering] Osnovy radiotekhniki. Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio, 1957. 726 p. (Radio) (MLRA 10:4)

Gonorovskiy, I.S.

109-10-7/19

AUTHOR: Gonorovskiy, I.S.

TITLE: More on the Phase Fluctuation in an Electron Tube Oscillator (Yeshche o flyuktuatsii fazy v lampovom generatore)

PERIODICAL: Radiotekhnika i Elektronika, 1957, Vol.II, No.10, pp. 1279 - 1288 (USSR)

ABSTRACT: The problem was dealt with by the author in an earlier paper (Ref.1), but since the above work was criticised by S.M. Rytov (Ref.5), it was thought necessary to clarify and amplify certain relevant sections of the above work. First, an amplifier having a single resonance circuit as its anode load is considered. The anode voltage is in the form:

$$u_a(t) = U_o \cos \omega_o t \qquad (1)$$

and the fluctuation voltage at the anode is:

$$u_\varphi(t) = U_\varphi(t) \cos \lambda = U_\varphi(t) \cos (\omega_o t - \theta) \qquad (2),$$

where $U_\varphi(t)$ is the amplitude and $\theta(t)$ is the phase of the fluctuating voltage component. It is shown that the average

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square value of the fluctuating voltage amplitude is given by Eq.(4), while the average square deviation of the phase is:

$$\overline{x^2(\tau)} = 2a\left[1 - e^{-\tau/\tau_0}\right] \qquad (17)$$

where:

$$a = \frac{eI_{ao}R^2}{U_0^2\tau_0} \quad , \qquad (16)$$

τ is the averaging time, I_{ao} is the DC anode current and $\tau_0 = 2Q/\omega_0$ where Q is the quality factor of the tuned circuit (see Fig.1). Eq.(17) takes the form of Eq.(18) for $\tau \to \infty$ (i.e. when the second term of Eq.(17) becomes 0). The analysis is extended to an LC oscillator (see Fig.2) in which the anode current is a function of the grid voltage as expressed by:

$$i_a = su_g - \gamma u_g^3 \quad . \qquad (20)$$

More on the Phase Fluctuation in an Electron Tube Oscillator.

It is shown that, in this case, the dispersion of the frequency deviation is given by Eq.(31), while the square phase deviation is expressed by:

$$\overline{x^2(\tau)} = 2a\left(\frac{\tau}{\tau_0} - 1 + e^{-\tau/\tau_0}\right). \qquad (35)$$

On the basis of the above results, it is concluded that most of the Rytov criticisms (Ref.5) were due to a misunderstanding, which arose as a result of certain simplifying assumptions which could not be elaborated due to the limited length of the author's paper. On the whole, the results of the above analysis coincided with those obtained by Rytov, even though the mathematics employed was considerably simpler, though undoubtedly less rigorous. There are 3 figures and 6 Slavic references.

SUBMITTED: September 3, 1956.

AVAILABLE: Library of Congress.

Card 3/3

AUTHOR: Gonorovskiy, I.S. SOV/109-3-12-7/13

TITLE: Transmission of Pulses with Linearly Changing Carrier Frequency, Through Selective Systems (O prokhozhdenii impul'sov s lineyno izmenyayushcheysya chastotoy zapolneniya cherez izbiratel'nyye sistemy)

PERIODICAL: Radiotekhnika i Elektronika, 1958, Vol 3, Nr 12, pp 1485 - 1494 (USSR)

ABSTRACT: A general solution of the problem is attempted. It is assumed that the input signal is in the form of a high-frequency pulse, extending over an interval $t_1 < t < t_2$ and is expressed by:

$$e(t) = E(t) \cos (\omega_1 t + \beta t^2 + \theta_0) \qquad (1)$$

where $E(t)$ is an arbitrary envelope of the signal, ω_1 is the carrier frequency at the instant t_1, θ_0 is the initial phase, and β determines the rate of the frequency change. The instantaneous frequency of the signal is expressed by Eq (2). The selective system to which the pulse is applied is in the form of a Gaussian filter and has the transfer coefficient K,

Cardl/4

which is expressed by Eq (3), where ω_p is the resonant frequency of the filter, $2\sqrt{a}$ is half the bandwidth of the filter and t_o is the slope of the phase characteristic. The unit impulse response of the filter is given by Eq (4). Consequently, the response of the filter to the pulse, expressed by Eq (1) is given by Eq (6). If the envelope of the input signal is an exponential function as defined by Eq (8), the output signal is expressed by Eq (9). By introducing a variable ξ, which is defined by Eq (10), the output signal is expressed by Eqs (11), where the function W_k is defined by Eq (12); the complex arguments z_1, z_2 are defined by Eqs (13) and (14), respectively. Eqs (11) can also be expressed in the form of Eq (17) in which function W_T is defined by Eq (16). The above formulae can be used to analyse a number of special cases. Thus, it is shown that the application of a high-frequency step (constant amplitude and constant frequency) produces an output signal which

is expressed by Eq (20) where Φ is the probability integral. If a signal of constant amplitude but with linearly changing frequency is applied to the filter, the output is in the form of Eq (21), where z_1 is defined by Eq (22). By adopting the notation of Eqs (23), it is possible to transform Eq (21) into Eq (26). From this, it follows that the envelope of the output signal is given by Eq (28). This formula was used to evaluate the envelope numerically and the results are shown graphically in Figures 1 and 2., for various values of the parameters m and n. It is also shown that Eq (21) can be represented as Eq (28). From this, it is found that the maximum value of the envelope is expressed by Eq (30). If the input signal is a pulse with a linearly changing frequency and if its duration is t_2, the envelope of the output signal can be expressed by Eq (36). The arguments z_1 and z_2 in Eq (36) can be expressed by either Eqs (35) or (37), depending on whether the frequency deviation in the pulse is small or large in comparison with

Transmission of Pulses with Linearly Changing Carrier Frequency, Through Selective Systems

the bandwidth of the filter. If the deviation is small, the output signal envelope is in the form of the curves shown in Figure 3; the case of large frequency deviations is illustrated in Figure 4. The author thanks T.M.Rubasheva, Engineer, for calculating the graphs in this paper. There are 4 figures and 6 references, 4 of which are Soviet and 2 English.

SUBMITTED: March 4, 1958

Card 4/4

AUTHORS: Neyman, L. R., Polivanov, K. M., SOV/105-58-7-29/32
Zhekulin, L. A., Gonorovskiy, I. S.,
Solov'yev, I. I., Tsypkin, Ya. Z., Gavrilov, M. A,
Ul'yanov, S. A., Lavrov, V. M. and others

TITLE: Professor G. I. Atabekov (Professor G. I. Atabekov)
To His 50th Birthday (K 50-letiyu so dnya rozhdeniya)

PERIODICAL: Elektrichestvo, 1958, Nr 7, pp. 93 - 93 (USSR)

ABSTRACT: Professor Grigoriy Iosifovich Atabekov, Doctor of Technical Sciences, was born in 1908. In 1930 he graduated from the Elektromekhanicheskiy fakultet Tbilisskogo politekhnicheskogo instituta (Dept. of Electromechanics at the Tbilisi Polytechnical Institute). He worked as engineer in the Zakenergo, then moved to Moscow where he worked as chief engineer in the Mosenergo and then in the Teploelektroproyekt. He worked out several distance-protection circuits which are used in energy systems. In 1945 an inertialess directed high-voltage protection device with a phase sensitive circuit was developed as control organ for the 400 kV transmission line from the Kuybyshev Power Plant to Moscow

Card 1/2

under his supervision in the TsNIEL of the Ministry of Electric Power Stations. In 1950 he was awarded the Stalin Prize for the development and introduction of the mass production of directed high-voltage filter protection device for electric supply lines. Since 1946 he is head of the Department of Theoretical Foundations of Electrical Engineering at the Moskovskiy aviatsionnyy institut (Moscow Institute of Aeronautics). He made 48 inventions and published 98 scientific papers. He is member of the editorial staff of the periodical "Izobretatel'stvo v SSSR" ("Inventions in the USSR") and the periodical "Izvestiya vysshikh uchebnykh zavedeniy" (Energetika) ("University News" (Power Engineering)). His papers were translated and published in Hungary, Rumania , and China. There is 1 photograph.

1. Scientific personnel--USSR

GONOROVSKIY, I.S.

AUTHOR: Gonorovskiy, I. S., Member of the Society 108-13-5-3/11

TITLE: On the Theory of the High-Frequency Autogenerators With Lagging Feedback (K teorii vysokochastotnykh avtogeneratorov s zapazdyvayushchey obratnoy svyaz'yu)

PERIODICAL: Radiotekhnika, 1958, Vol. 13, Nr 5, pp. 19-30 (USSR)

ABSTRACT: Here the possibility of a stable generation of a spectrum of equidistant frequencies in dependence on the shape of the frequency characteristic in the oscillation system and on the ratio between the transmission band of this system and the lag is investigated. The autogenerator here is represented as a combination of a resonance amplifier with an amplitude limiter in the feedback circuit. Here consciously the consideration of fine details of the voltampere characteristic of the electron device is dropped and the latter is traced back to an ideal limiter. This allows to determine the basic characteristics of the phenomenon without employing

Card 1/4

nonlinear differential equations. The possible steady modes of operation are investigated and the stability of the spectrum production is determined. Here is shown: 1) If the transmission band of the selective system contains not more than two frequencies which differ for the quantity $2\pi/(\tau_1 + \tau_k)$, a stable generation (soft way of operation) is possible only at one of these frequencies, independent of the shape of the resonance characteristic of the system. 2) If the number of frequencies reaches three and more a stable generation of the spectrum of equidistant frequencies (with the interval $2\pi/(\tau_1 + \tau_k)$) is possible on the following condition: The resonance characteristic of the selective system is saddle-shaped and secures the amplification of the "side"-frequencies with regard to the central frequency. 3) The complicated auto-oscillation which is produced at the limiter output is a phase modulated oscillation with the "modulation"--period equal to the retardation quantity.

Card 2/4 4) The oscillation produced at the output of the selective

system, i. e. the really measurable and exploited one, can have a considerable amplitude modulation, forming because of the unequal transmission of the spectrum which acts at the limiter output. The law of the instantaneous phase variation, however, must be the same one as at the limiter output. This condition must be regarded as a claim to the oscillation system, which is necessary for a steady mode operation in the spectrum generation.

The main characteristic of the autogenerator with lagging feedback is the capacity of generating different frequencies and on certain conditions also several frequencies simultaneously. The mechanism of the increase and of the stabilization of the vibrations in case of free starting as well as in case of starting from sufficiently strong high-frequency pulses will be discussed in a separate article.

τ_k - the inclination of the phase characteristic.

On the Theory of the High-Frequency Autogenerators With Lagging Feedback 108-13-5-3/11

T_1 - the amplitude characteristic of the nonlinear inertialess fourupole. There are 13 figures and 8 references, 7 of which are Soviet.

SUBMITTED: October 4, 1957

AVAILABLE: Library of Congress

1. Generators--Theory

Card 4/4

GONOROVSKIY, I.S.

Establishment of self-oscillations in a high-frequency oscillator with retarding feedback. Radiotekhnika 14 no.1:25-33 Ja '59. (MIRA 12:2)

1. Deystvitel'nyy chlen Nauchno-tekhnicheskogo obshchestva radiotekhniki i radiosvyazi im. A.S.Popova.
(Oscillators, Electric)

80581

S/109/60/005/06/003/021
E140/E163

9.3230

AUTHOR: Gonorovskiy, I.S.

TITLE: ~~The Effect of a Voltage~~ with Rapidly Varying Frequency on an Inertial System

PERIODICAL: Radiotekhnika i elektronika, 1960, Vol 5, Nr 6, pp 902-912 (USSR)

ABSTRACT: In problems concerning an external force with varying frequency the assumption is usually made that the frequency variation is relatively slow. The purpose of the present article is the analysis of the case where the frequency of the external force varies so rapidly that the time of passage of the signal frequency through the network passband is small in comparison with the time constant of the network. In particular the case of the effects on an inertial system of "zero beats" arising in beats of frequency-modulated oscillations is studied. The author first determines the signal structure in the region of low values of instantaneous frequency where the waveform of the signal is no longer "almost" sinusoidal. It is found that the effect of the signal in this case has the character of an impulse

Card 1/3

S/109/60/005/06/003/021
E140/E163

The Effect of a Voltage with Rapidly Varying Frequency on an Inertial System

force whose intensity depends on the initial phase of the signal, i.e. the phase at the instant of passage of frequency through the zero value. An exact expression is found for the filter response to a single cycle of signal frequency variation. The solution involves the probability integral of complex argument. The approximate response has a shape of the impulse characteristic of the network with initial amplitude proportional to the ratio of passband to the square root of the rate of variation of angular frequency. The amplitude also depends on the initial phase of the signal at the instant of zero beat. The case is further considered of a resonant system with passband located in the region of distorted waveform. A similar conclusion to the above is reached. A proposal is made for generating a normalised random process by generating zero beats between two frequencies such that the phase of the output oscillation at instants of zero beat is random and the time constant of the system is much

Card 2/3

80581

S/109/60/005/06/003/021
E140/E163

The Effect of a Voltage with Rapidly Varying Frequency on an Inertial System

greater than the interval between impulses.

There are 4 figures and 3 Soviet references.

Card
3/3

SUBMITTED: December 19, 1959

37125
S/108/62/017/005/001/007
D407/D301

9.2550

AUTHOR: Gonorovskiy, I. S., Member of the Society (see Association)

TITLE: Simulation of ladder filter by means of a delay circuit

PERIODICAL: Radiotekhnika, v. 17, no. 5, 1962, 5-15

TEXT: A simulation principle is described, based on the replacement of a single signal-pass through a ladder network, by the repeated passage of same signal through a single network, inserted in the feedback circuit. This principle is illustrated by optimal filtration of a radio-pulse with frequency-modulated signal. Experimental data are given on the compression of pulses by means of a delay circuit with phase-compensating networks. Such a method of simulation makes it possible to determine the principal characteristics of a filter by a study of one or more of its networks, prior to the manufacture and assembly of the complete filter. First, formulas are derived for the spectral density and for

Card 1/5

Simulation of ladder ...

the phase-characteristic of the signal. Phase-compensating filters, consisting of second-order networks, are considered for the purpose of assessing the requirements towards the characteristics of the closed circuit. By means of a delay circuit, containing but one network, it is possible to analyze a signal structure, corresponding to the output of an actual ladder filter. This makes it possible to select experimentally the network parameters and the elements of matching and compensation; thereby the required number of networks is simply determined according to the number of signal-passes, for which the best shape of compressed signal is obtained. The realization of the above method involves the fulfilment of a number of rigorous conditions, imposed on the characteristics of the elements of the feedback circuit. Two of these conditions (system stability and a decrease in circuit damping) are contradictory. By using special methods of automatic control, it is possible to reduce considerably the gain in the damping circuit, and hence to increase the number of signal passes. It was found that a filter can be simulated by means of a circuit, containing a single network, provided the required total number of networks is moderate

Simulation of ladder ...

(about 10 to 15). In order to check the effectiveness of the proposed method the following input-pulse parameters were selected: f_o = 2.5 Mc., $2f_D$ = 1 Mc.; (f_o denotes the central frequency, f_D the frequency spectrum of the input signal). Oscillograms of the delay-circuit output voltage are shown, with the insertion (in the circuit) of one, two and ten networks respectively (τ = 8 μsec). From the comparison of the oscillograms it follows that 10 signal-passes through a circuit with a single network have the same effect as 1 pass through 10 networks. This shows that the influence of parasitic circuit parameters is negligible in the case of 10 passes. Similar oscillograms are shown for pulse durations τ equal to 20, 50 and 100 μseconds, respectively. The experimental data obtained are not only valuable as proof of the efficiency of the simulation method employed, but also for the technique of designing optimal filters. Experiment has shown that it is possible to obtain large coefficients of pulse compression by means of filters consisting of a large number of phase-compensating networks. On the other hand, it was found that the frequency-amplitude filter cha-

Card 3/5

Simulation of ladder ...

racteristics require careful compensation. This should be carried out for each group of networks separately. Properties of the delay-circuit are also examined under conditions of signal separation against noise background, and under "passive generation" conditions. A simple gating device can be used for separating the required signal. If the delay time $t_d < \tau$, then the noises accumulate and the signal-to-noise ratio at the output is inferior to that of comparable "open" phase-compensating filters. If $t_d > \tau$, this shortcoming can be overcome. A delay circuit with a delay line, corresponding to $t_d > \tau$, can also be used for passive generation of signals; the pertinent relationships between the parameters of the phase-compensating network and of the output signal, are derived. There are 9 figures and 5 references: 2 Soviet-bloc and 3 non-Soviet-bloc. The references to the English-language publications read as follows: J. R. Klauder, A. C. Price, S. Darlington, W. J. Albersheim. BSTJ, v. 39, no. 4, 1960; C. E. Cook. Pire, v. 48, no. 3, 1960.

Card 4/5

Simulation of ladder ...

S/108/62/017/005/001/007
D407/D301

ASSOCIATION: Nauchno-tekhnicheskoye obshchestvo radiotekhniki i elektrosvyazi im. A. S. Popova (Scientific and Technical Society of Radio Engineering and Electrical Communications imeni A. S. Popov) [Abstracter's note: Name of Association was taken from first page of journal.]

SUBMITTED: October 6, 1961

Card 5/5

YEFIMOCHKINA, Yevgeniya Petrovna; KOZHEVNIKOV, Naum Iosifovich; GONOROVSKIY, I.S., retsenzent; MIKHEYEVA, Ye.A., retsenzent; GAVRILOVA, T.M., red.

[Problems in the theory of probability] Zadachi po teorii veroiatnostei. Moskva, Mosk. aviatsionnyi in-t im. Sergo Ordzhonikidze, 1963. 96 p. (MIRA 17:7)

GONOROVSKIY, I.S.; ITSKHOKI, Ya.S., doktor tekhn. nauk, prof., retsenzent; VLASOV, V.F., kand. tekhn. nauk, dots., retsenzent; LAPIS, A.A., kand. tekhn. nauk, dots., retsenzent; ZABOLOTSKIY, N.G., red.

[Radio circuits and signals] Radiotekhnicheskie tsepi i signaly. Izd.2., ispr. Moskva, Sovetskoe radio, 1964. 694 p. (MIRA 17:11)

GONOROVSKIY, I.S.; ITSKHOKI, Ya.S., doktor tekhn. nauk, prof., retsenzent; VLASOV, V.F., kand. tekhn. nauk, dots., retsenzent; LAPIS, A.A., kand. tekhn. nauk, dots., retsenzent; ZABOLOTSKIY, N.G., red.

[Radio circuits and signals] Radiotekhnicheskie tsepi i signaly. Moskva, Sovetskoe radio, 1963. 694 p. (MIRA 17:5)

SVETLOV, A.I., red.-sostavitel'. Prinimali uchastiye: GOLOVANOV, S.I.; GONOROVSKIY, P.A.; DOBRYNIN, M.I.; YERMILOV, Ye.M.; KORNEYEV, S.G.; KULAKOVA, A.K.; KURBATOV, I.A.; LYKOV, V.N.; MARTYNOV, B.F.; MILOSERDOV, S.S.; PESHKOV, V.P.; SOKHRANSKIY, A.V.; SMUROV, A.Ya.; TOPALOV, V.S.; SHAPOVALOV, P.F.; POPOV, V.N., tekhn.red.

[City on the TSna] Gorod na TSne. Tambov, Tambovskoe knizhnoe izd-vo, 1960. 174 p. (MIRA 14:4)
(Tambov--Guidebooks)

GONOV, A.

On the differential geometry of the real ruled surfaces whose invariables have special values, or satisy given connections. p. 99.

GODISHNIK. MATEMATIKA I FIZIKA. Sofiia, Bulgaria, Vol. 50 No. 1, 1955/56 (published 1957)

Monthly List of East Accession (EEAI) LC, Vol. 9, No. 1 January 1960

Uncl.

G'ONOV, Aleksandur

The congruence properties of the straight lines, average surfaces and average envelopes whose focal surfaces are forming a W-congruence. Godishnik fiz 55 no.1:159-173 '60/'61 (publ. '62)

ZAKHARCVA, K.P.; G'ONOV, Al. V. [translator]

Some problems of instilling into pupils the concept of the theory of groups during the lesson on geometric transformations. Mat i f.'z shk.g 7 no.5:35-40 '64.

1. School No.444, Moscow (for Zakharova).

GONSALES, A.; KURGANOV, V.M.

Remodelling a regenerator unit for catalytic cracking. Nefteper. i neftekhim. no.7:3-6 '64. (MIRA 17:11)

1. Salavatskiy kombinat i Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefti i gaza i polucheniyu iskusstvennogo zhidkogo topliva.

L 57116-65 EWT(m)/EPF(c)/T Pr-4 WE

ACCESSION NR: AP5018685 UR/0318/64/000/009/0012/0015 17

AUTHOR: Kurganov, V. M.; Gonsales, A. 11 C

TITLE: Effect of contact time on the quality of the reaction mixture in a catalytic cracking reactor

SOURCE: Neftepererabotka i neftekhimiya, no. 9, 1964, 12-15

TOPIC TAGS: petroleum refining, catalysis

Abstract: A study of the effect of contact time on the yield and quality of cracking products showed that there is a rate of primary decomposition of hydrocarbon molecules at high space velocities. During the first period, the crude and the catalyst form approximately 30-60% by weight of the gasoline obtained in the cracking process. In addition, amounts of unsaturated compounds are formed in the reactor products, and the residence time of the product in the reaction zone results in reduction in content of unsaturates and an increase in the content of aromatic hydrocarbons. Processing diesel fractions in the catalytic cracking process as a mixture with fractions above 300° is recommended.

Orig. art. has 1 figure, 1 graph, and 4 tables.

Card1/2

L 57116-65
ACCESSION NR: AP5018685

ASSOCIATION: Salavatskiy kombinat (Salavat Combine); VNIINP

SUBMITTED: 00 ENCL: 00 SUB CODE: FP, GC

NO REF SOV: 002 OTHER: 000 JPRS

Card 2/2

KURGANOV, V.M.; GONSALES, A.; VIV'YER, A.S.

Remodeling the catalyst circulation system in a catalytic cracking unit. Nefteper. i neftekhim. no.3:5-10 '65. (MIRA 18:5)

1. Salavatskiy neftekhimicheskiy kombinat i Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefti i gaza i polucheniyu iskusstvennogo zhidkogo topliva.

GONSALES, A.A.; KURGANOV, V.M.; AGAFONOV, A.V.; ABAYEVA, B.T.; POLETAYEV, V.B.; VIV'YER, A.S.; RUDOVICH, M.A.; BELYAYEVA, Z.G.; RUTMAN, G.I.

Results of redesigning an industrial catalytic-cracking device. Nefteper. i neftekhim. no.9:6-10 '63. (MIRA 17:8)

1. Salavatskiy kombinat i Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefti.

KURGANOV, V.M.; GONSALES, A.G.

Remodeling a catalytic cracking furnace. Nefteper. i neftekhim. no.5:36-39 '64. (MIRA 17:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefti i gaza i polucheniyu iskusstvennogo zhidkogo topliva i Salavatskiy neftekhimicheskiy kombinat.

S/282/63/000/002/003/005
A059/A126

AUTHORS: Kurganov, V. M., Gonsales, M. A., Agafonov, A. V.

TITLE: Methods of supplying stocks to a reactor of catalytic cracking

PERIODICAL: Referativnyy zhurnal, otdel'nyy vypusk, 47. Khimicheskoye i kholodil'noye mashinostroyeniye, no. 2, 1963, 33, abstract 2.47.186 (Novosti neft. u gaz. tekhn. Neftepererabotka i neftekhimiya, no. 8, 1962, 15 - 21)

TEXT: Stock feeding to the reactor by single vapor-liquid flow has considerable advantages over the separate feeding of the liquid and vapor phases to the reactor, greatly simplifies the operation and reduces the operating expenses of stock preparation. The contacting method based on spraying of the liquid phase over the surface of the catalyst layer is the most unsuitable of all known methods, since it does not exclude coking of the internal surfaces and conglomerate formation. The utilization of any cross section of dropping catalyst film for contacting with the stock creates a uniform distribution of the liquid residue on the greater part of the catalyst, but does not exclude coking of the

Card 1/2

Methods of supplying stocks to a...

reactor. The most advantageous of the alternatives considered is the setup based on the method of phase contacting under restricted conditions on moving in the suspended state below the distributing plate (model ВНИИНП - К-18 (VNIINP-K-18)). Fitting out the reactors of catalytic-cracking devices with an inlet assembly for the stock according to the model VNIINP-K-18 permits: to process heavy petroleum stocks without coking of the reactor and conglomerate formation; to increase the yield of light petroleum products by 3 to 5%, to reduce catalyst consumption by 0.5 to 1.5 kg/t of the stock; to reduce the temperature of the stock on discharge from the furnace from 480 - 490°C to 420 - 450°C; to prolong the time of passage through the setups and to stabilize their capacity during the whole cycle; to eliminate laborious and dangerous work involving the removal of coke from the internal surface of the reactor. There are 4 figures and 8 references.

[Abstracter's note: Complete translation]

KURGANOV, V.M.; GONSALES, M.A.

Special features of systems of feeding of cracking reactor. Khim.i tekh.topl.i masel 7 no.5:5-10 My '62. (MIRA 15:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefti i gazov i polucheniyu iskusstvennogo zhidkogo topliva i Salavatskiy kombinat.
(Cracking process)

GONSEROVSKAYA, T. S.

57

PHASE I BOOK EXPLOITATION SOV/5460

Leningradskiy metallicheskiy zavod. Otdel tekhnicheskoy informatsii.

Nekotoryye voprosy tekhnologii proizvodstva turbin (Certain Problems in the Manufacture of Turbines) Moscow, Mashgiz, 1960. 398 p. (Series: Its: Trudy, vyp. 7) Errata slip inserted. 2,100 copies printed.

Sponsoring Agency: RSFSR. Sovet narodnogo khozyaystva Leningradskogo ekonomicheskogo administrativnogo rayona, Upravleniye tyazhelogo mashinostroyeniya, and Leningradskiy dvazhdy ordena Lenina metallicheskiy zavod. Otdel tekhnicheskoy informatsii.

Ed. (Title page): G. A. Drobilko; Editorial Board: Resp. Ed.: G. A. Drobilko, B. A. Glebov, A. M. Mayzel', and M. Kh. Mernik; Tech. Ed.: A. I. Kontorovich; Managing Ed. for Literature on Machine-Building Technology: Ye. P. Naumov, Engineer, Leningrad Department, Mashgiz.

PURPOSE: This collection of articles is intended for technical personnel in turbine plants, institutes, planning organizations, as well as for production innovators.

Card ~~1/12~~

57

Certain Problems (Cont.) SOV/5460

COVERAGE: The experience of the LMZ (Leningradskiy metallicheskiy zavod - Leningrad Metalworking Plant) in the manufacture of modern large-capacity turbines is presented. Methods for the rationalization of basic manufacturing processes and for the mechanization and automation of manual operations are given. Descriptions of attachments and tools designed by LMZ for improving labor productivity and product quality are provided, and advanced inspection methods discussed. References accompany some articles. No personalities are mentioned. There are 26 references: 25 Soviet and 1 English.

TABLE OF CONTENTS:

Card 2/12

12300

25434
S/137/61/000/006/058/092
A006/A101

AUTHOR: Gonserovskaya, T.S.

TITLE: Welding piles of 15Kh11MF steel speed-wheel blades and nozzle segments

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 6, 1961, 15, abstract 6E103 (V sb. "Nekotoryye vopr. tekhnol. proiz-va turbin", Tr. Leningr. metallich. z-da, no. 7, Moscow-Leningrad, 1960, 254 - 260)

TEXT: KTI-9-57 (KTI-9-57) electrodes are employed for welding piles of 15Kh11MF and 15Kh11MFL blades and nozzle segments. Welding is performed on d-c of reverse polarity. The piles which are beveled for welding only on the section of the shaft perimeter and on the bandage, are welded in a device with local preheating to 300 - 350°C. To assure penetration of the seam root, the initial passes are welded with 3 mm diameter electrodes, and the subsequent passes with 4 - 5 mm electrodes. Piles with beveling for welding on the whole perimeter of the shaft and bandage are gripped in the device and then welded outside with joint preheating in an electric furnace to 300 - 350°C. Fillet welds are alternatingly applied into the shaft and bandage openings. Welded segments of high

Card 1/2

25434 S/137/61/000/006/058/092
A006/A101

Welding piles ...

pressure nozzles are manufactured in two variants: as welded-forged and welded-cast segments. The assembly and welding of welded-forged segments is performed in the following sequence: welding-on of inserts, the rim, the reinforcing ring and the end cap. The welding and assembly of welded-cast segments requires the use of a device of simple design.

V. Gorb

[Abstracter's note: Complete translation]

Card 2/2

EWT(m)/EWA(d)/EWP(v)/EWP(t)/EWP(k)/EWP(b)

NR. AT4047026 S/2983/64/000/011/0052/0071

Goncerovskaya, T. S. (Engineer)

TITLE: Materials for the welded parts of steam, gas and hydraulic turbines

Trudy. Tekhnologiya svarochnogo proizvodstva (Technology of welding), 52-71

steam turbine, gas turbine, hydraulic turbine, heat resistant steel, welding electrode

steel

15 C, 0.17-0.37 Si, 0.4-0.7 Mn, 0.9-1.2 Cr, 0.25-0.35 Mo, 0.15-0.35 V, not

Card 1/3

L 13768-65
ACCESSION NR: AT4047026

... 0.03 S, not over 0.03 P), and of the TsL-20 electrodes for these metals (0.08-0.13 C, ... Si, 0.6-0.9 Mn, 0.8-1.2 Cr, 0.4-0.7 Mo, 0.10-0.25 V, not over 0.04 S, not ... the best results when welding at the mentioned temperatures. For ... 15Kh11MFB steel (0.14-0.22 ... 1.0 Mn, ... 1.05 Mo, 0.2-0.35 V ... 0.025 S and not over 0.03 P) and KT1-10 electrodes (0.09-0.13 C, 0.3-0.7 Si, 0.6-1.1 Mn, 9.5-11.5 ... 0.8-1.3 W, 0.2-0.4 V, not over 0.03 S, not over 0.03 P) show the best results for welding. For gas turbines having working temperatures above 600 C, different steels and electrodes are used with not over 0.12 to not over 0.32 C, not over 0.3 ... Si, 0.5-4.0 Mn, 14-26 Cr, 7.5-38 Ni, 0.6-10 Mo, 0.35-0.9 V, 0.6-3.5 W, ... Nb, 0.2-1.5 Ti, not over 0.015 to not over 0.03 S, and not over 0.025 to not ... hydraulic turbines are made of 10Kh18N5G3D2 ... steel (not over 0.1 C, ... S, not ... 20 ... and 12 ... steel ... used for welding ... electrodes ... 15Kh11MFB, ... steel ... heterogeneous ... steel with perlite grade TsL ... low-alloy steel ... steels are welded ... weld metal

Card 2/3

L 13768-65
ACCESSION NR: AT4047026

2

[illegible] hydraulic turbines [illegible] made of [illegible] steel and ES-925 [illegible] cement

[illegible] resistance [illegible]

[illegible] Leningradskiy metallicheskiy zavod [Leningrad Metal Factory]

[illegible] 00 ENCL: 00 SUB CODE: MM, PR

SUBMITTED: 002 OTHER: 000

Card 3/3

[illegible] EWP(k)

AR[illegible] [illegible]

621.791.011:669.14.018.5/4

SOURCE: Ref. zh. Metallurgiya, Abs. 1E57

AUTHOR: Gonserovskaya, T. S.

TITLE: Materials for welded structural elements in steam, gas and hydraulic turbines

CITED SOURCE: Tr. Leningr. metal. z-da, v. 11, 1964, 52-71

TOPIC TAGS: metallurgy, ferrous metals, welding, turbine, heat resistance

[illegible] Materials for welded parts at the Leningrad metal plant were con- [illegible] experience in the [illegible] heat [illegible] and [illegible] welded units in turbines shows that [illegible] welded seams an [illegible] electrodes was used [illegible] temperatures [illegible] similar chrome-pearlite welded [illegible] TsL-[illegible] electrodes are used. For welding austenite steels of [illegible], electrodes

Card 1/2

L 52945-65

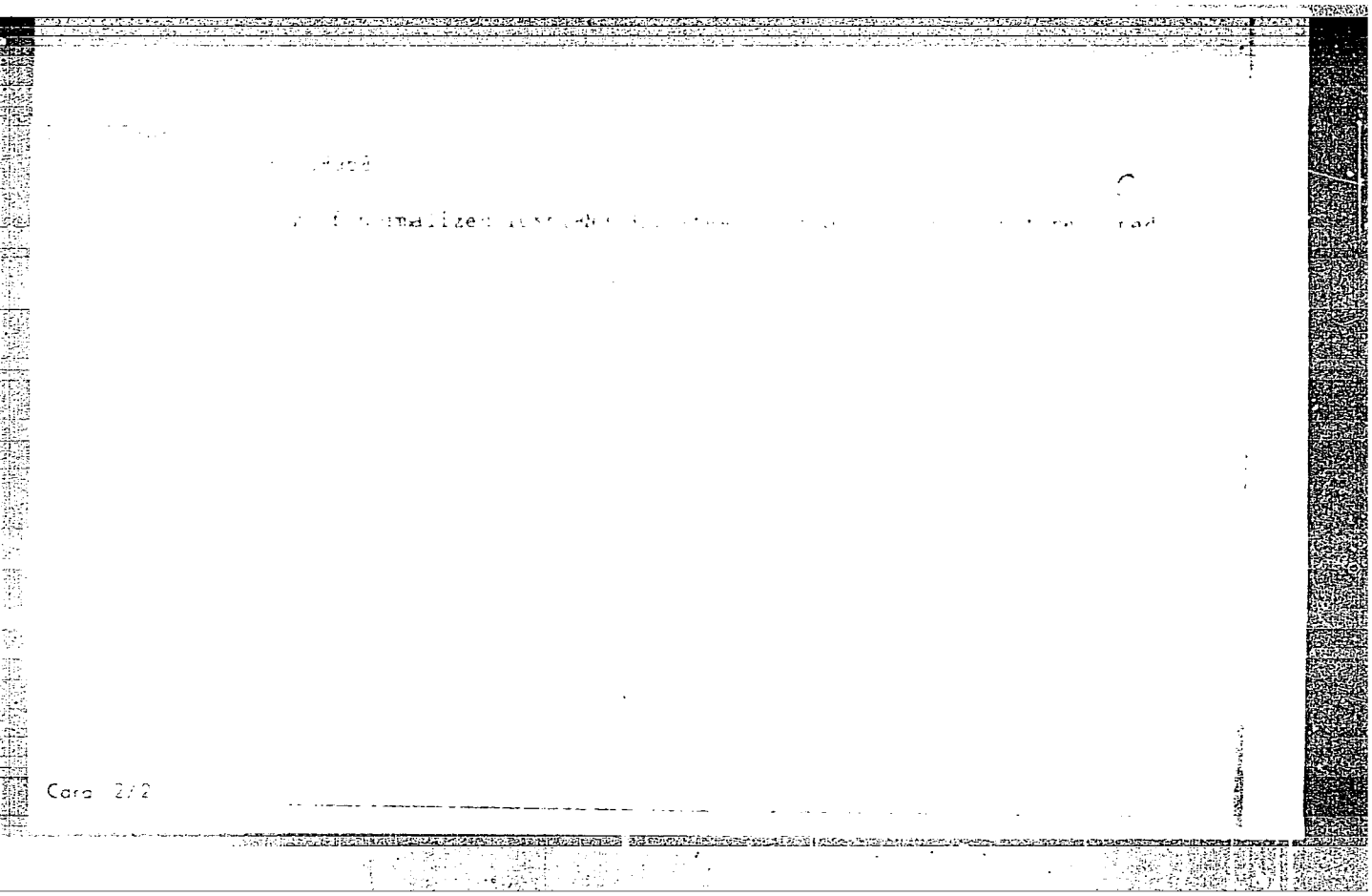
ACCESSION NR: AR5008966

3

which should have 2-5% ferrite phase in the molten metal are used. 10Kh18N3G3D2. L steel and EA-925 electrodes which are stable in cavitational and abrasive conditions are used in making hydraulic turbines. Work is in progress on overcoming problems in welding 30Kh10G10 steel, which, according to preliminary data, is highly resistant to cavitational and abrasive wear

SUB CODE: MM, IE ENCL: 00

TOPIC TAGS: metallurgy, ferrous metals, welding, electoslag welding



Copy 2/2

GONSEROVSKIY, F.G., inzhener.

Meeting on welding heat-resistant austenitic steels. Energomashinostroenie no.3:31-32 My '56. (MLRA 9:9)
(Steel--Welding)

GONSEROVSKIY, F.G., inzhener.

Welding austenitic steel at the Leningrad Metallurgical Plant.
Energomashinostroenie no.4:23-26 Ap '56. (MLRA 9:7)
(Steel--Welding)

18(2,5) SOV/125-59-9-11/16

AUTHOR: Gonserovskiy, F.G., Engineer

TITLE: Influence of Sequential Layer Peening on Metal Quality in Austenitic Welds

PERIODICAL: Avtomaticheskaya svarka, 1959, Nr 9, pp 81-87 (USSR)

ABSTRACT: The Leningrad Metal Works imeni Stalin had to surmount a number of difficulties in connection with the introduction of austenitic steel welding, due to the appearance of 1-2 mm long cracks in metal built up by electrodes TsT-7 and TsT-13. It was assumed, sequential peening would eliminate these shortcomings because in perlite welds it reduces the stresses during the process of welding. This method was applied also to austenitic welds and began to be used on a large scale. However, in 1955-1957, special research, carried out in the central laboratory of the Works for determining the influence of peening on mechanical properties of austenitic welds has led to altogether different conclusions. During research, test-piece such as shown on page 82 were used. Their welding was performed by

Card 1/3

Influence of Sequential Layer Peening on Metal Quality in Austenitic Welds

TsT-7 electrodes with a diameter about 3-4%. Conditions of welding were: Current intensity 110-130 amp.; tension 30-35 v. Results of research in respect of properties of the metal fused by means of above electrodes are given in Table 1. Tables 2(Rider) and 3 give figures pertaining to transversal shrinkage, welding stresses and mechanical properties of joints welded both with peening and without it. The final conclusions drawn on the basis of research are: Sequential peening of austenitic welds is not expedient; in non-rigid welded bonds, the use of it reduces, to a slight degree, residual stresses in welds, but, in the case of rigid bonds it increases the stresses. At the same time it changes mechanical properties of welds by increasing their strength and diminishing their plasticity and shock tenacity. There are 4 tables, 4 diagrams and 4 Soviet references.

SOV/125-59-9-11/16

Influence of Sequential Layer Peening on Metal Quality in Austenitic Welds

ASSOCIATION: Leningradskiy ordena Lenina metallicheskiy zavod imeni Stalina (Leningrad Order of Lenin Metal Works imeni Stalin)

SUBMITTED: September 20, 1958

Card 3/3

GONSEROVSKIY, F.G.

57

PHASE I BOOK EXPLOITATION SOV/5460

Leningradskiy metallicheskiy zavod. Otdel tekhnicheskoy informatsii.

Nekotoryye voprosy tekhnologii proizvodstva turbin (Certain Problems in the Manufacture of Turbines) Moscow, Mashgiz, 1960. 398 p. (Series: Its: Trudy, vyp. 7) Errata slip inserted. 2,100 copies printed.

Sponsoring Agency: RSFSR. Sovet narodnogo khozyaystva Leningradskogo ekonomicheskogo administrativnogo rayona, Upravleniye tyazhelogo mashinostroyeniya, and Leningradskiy dvazhdy ordena Lenina metallicheskiy zavod. Otdel tekhnicheskoy informatsii.

Ed. (Title page): G. A. Drobilko; Editorial Board: Resp. Ed.: G. A. Drobilko, B. A. Glebov, A. M. Mayzel', and M. Kh. Mernik; Tech. Ed.: A. I. Kontorovich; Managing Ed. for Literature on Machine-Building Technology: Ye. P. Naumov, Engineer, Leningrad Department, Mashgiz.

PURPOSE: This collection of articles is intended for technical personnel in turbine plants, institutes, planning organizations, as well as for production innovators.

Card ~~1/12~~

Certain Problems (Cont.) SOV/5460

COVERAGE: The experience of the LMZ (Leningradskiy metallicheskiy zavod - Leningrad Metalworking Plant) in the manufacture of modern large-capacity turbines is presented. Methods for the rationalization of basic manufacturing processes and for the mechanization and automation of manual operations are given. Descriptions of attachments and tools designed by LMZ for improving labor productivity and product quality are provided, and advanced inspection methods discussed. References accompany some articles. No personalities are mentioned. There are 26 references: 25 Soviet and 1 English.

TABLE OF CONTENTS:

ZEMZIN, V.N., kand.tekhn.nauk; SMIRNOVA, I.D., inzh.; GONSEROVSKIY, F.G., inzh.; BIRYUKOV, V.M., inzh.

Welding high-chromium heat-resistant steel for steam turbine parts. Trudy LMZ no.9:159-174 '62. (MIRA 16:6)
(Steel, Heat-resistant--Welding)
(Steam turbines--Design and construction)

PETROV, Georgiy L'vovich; ZEMZIN, Viktor Nikolayevich; GONSEROVSKIY, Fedor Grigor'yevich; KUREPINA, G.N., red. izd-va; BARDINA, A.A., tekhn. red.

[Welding of heat-resistant stainless steels] Svarka zharoprochnykh nerzhaveiushchikh stalei. Moskva, Mashgiz, 1963. 247 p. (MIRA 16:5)

(Steel, Stainless--Welding)
(Steel, Heat--Resistant--Welding)

GONSEROVSKIY F. G.

PHASE I BOOK EXPLOITATION SOV/6435

Petrov, Georgiy L'vovich, Viktor Nikolayevich Zemzin, and Fedor Grigor'yevich Gonserovskiy

Svarka zharoprochnykh nerzhaveyushchikh staley (Welding of Heat-Resistant Stainless Steels) Moscow, Mashgiz, 1963. 247 p. Errata slip inserted. 5500 copies printed.

Reviewer: I. A. Zaks, Engineer; Ed.: B. I. Bruk, Candidate of Technical Sciences; Ed. of Publishing House: G. N. Kurepina; Tech. Ed.: A. A. Bardina; Managing Ed. for Literature on Machine-Building Technology, Leningrad Department, Mashgiz: Ye. P. Naumov, Engineer.

PURPOSE: This book is intended for engineering personnel of plants, design bureaus, and scientific research establishments concerned with the manufacture and design of welded structures made from heat-resistant steels and alloys.

Card 1/2

COVERAGE: The book reviews problems connected with welding of high-alloy heat-resistant chromium and chromium-nickel steels and some heat-resistant nickel alloys, and problems of welding these materials to low-alloy steels used in structures which operate at high temperatures. The introduction and chapters I, III, and IV were written by G. L. Petrov, chapters II and V by V. N. Zemzin and chapter VI by F. G. Gonserovskiy. No personalities are mentioned. Most of the 192 references are Soviet.

TABLE OF CONTENTS

Properties of EA-925 hard-facing electrodes

Leningradskiy metallicheskiy zavod, Otdel tekhnicheskoy [illegible]
[Trudy] no. 11, [illegible]
Svarochnoye (Technology of welding), [illegible]

TAGS: hard facing, EA 925 hard facing electrode, deposited [illegible]

The welding laboratory of the Leningradskiy metallurgi- [illegible] (Leningrad Metallurgical [illegible]) developed and tested [illegible] hard-facing [illegible] other wearing parts of hy[illegible]. The new electrodes, designated EA-925, have a core of E1-925 or E1-925 (17-7 PH steels) welding wire, and yield a hard-facing metal with an austenitic-ferritic microstructure which, after heat treatment at

Card 1/2

L 13551-65
ACCESSION NR: AT4047027

—020C, has an HB hardness of 430—470. The deposited metal contains 0.25—0.30% C, 0.9 max% each Si and Mn, 22—25% Cr, 4.5—5.0% Ni, 2.5—3.0% Mo. Laboratory and field tests showed the metal to be resistant to corrosion, cavitation, abrasion wear, and welding-formation. EA-925 electrodes permit hard facing in all positions without preheating. The use of EA-[illegible] makes it possible to reduce [illegible] times, as compared with [illegible] electrodes [illegible] turbine working parts. EA-[illegible] electrodes have been used for hard facing turbine working wheels at the Bratsk Hydroelectric Power Station. Orig. art. has: 3 figures and 6 tables.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: MM, PR

NO REF SOV: 004 OTHER: 000 ATD PRESS: 3130

Card 2/2

GONSEROVSKIY, F.G., inzh.

Properties of 15Kh5MF welded steel joints made by the electric slag method. [Trudy]LMZ no.11:288-298 '64. (MIRA 17:12)

L 3239-66 EWT(m)/EWA(d)/EWP(v)/T/EWP(t)/EWP(k)/EWP(z)/EWP(b)/EWA(h)/EWA(c) IJP(c)
JD/HM/JW/JG

ACCESSION NR: AP5021984 UR/0286/65/000/014/0059/0059
621.791.89

AUTHOR: Gonserovskiy, F. G.; Bestsennyy, G. I.

TITLE: Method of welding vanadium to chromium and chromium-nickel stainless steels and nickel alloys. Class 21, No. 172924

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 14, 1965, 59

TOPIC TAGS: chromium steel, stainless steel, chromium nickel steel, nickel alloy, vanadium, vanadium welding, stainless steel vanadium joining, nickel alloy vanadium joining

ABSTRACT: An Author Certificate has been issued for a method of welding vanadium to chromium- or chromium-nickel stainless steels and nickel-base alloys. To obtain better ductility and thermal stability of welded joints, the welding is done with the use of a third metal, an Armco iron-base alloy containing 11—17% Cr. [MS]

ASSOCIATION: Organizatsiya gosudarstvennogo komiteta po sudostroyeniyu SSSR (Organization of the State Committee on Ship Building, SSSR)

SUBMITTED: 22Apr64 ENCL: 00 SUB CODE: MM
NO REF SOV: 000 OTHER: 000 ATD PRESS: 4104

Joining of dissimilar metals

Card 1/1

L 22813-66 EWT(m)/EPF(n)-2/EWP(v)/T/EWP(t)/EWP(k) IJP(c)

ACC NR: AP6011215 SOURCE CODE: UR/0413/66/000/006/0052/0053

INVENTOR: Gonserovskiy, F. G.; Sherman, V. P.

ORG: none

TITLE: Method of joining niobium and its alloys to vanadium. Class 21, No. 179855

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 6, 1966, 52-53

TOPIC TAGS: welding, fusion welding, niobium, niobium alloy, niobium welding, alloy welding, vanadium, filler material, titanium, titanium filler, niobium titanium welding

ABSTRACT: This Author Certificate introduces a method of welding niobium and its alloys to vanadium. To ensure a high ductility of the weld, titanium is used as filler material. [ND]

SUB CODE: 13/ SUBM DATE: 22Apr64/ ATD PRESS: 4229

welding of dissimilar metals

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UDC: 621.791.762.5.042

YAGUPOL'SKIY, L.M.; VISHNEVSKAYA, G.O.; YAVORSKIY, D.F.; GRUZ, B.Ye.; MAKSIMENKO, A.S.; KHASKIN, I.G.; GONSETSKAYA, Ya.V.; KIPRIANOV, A.I.

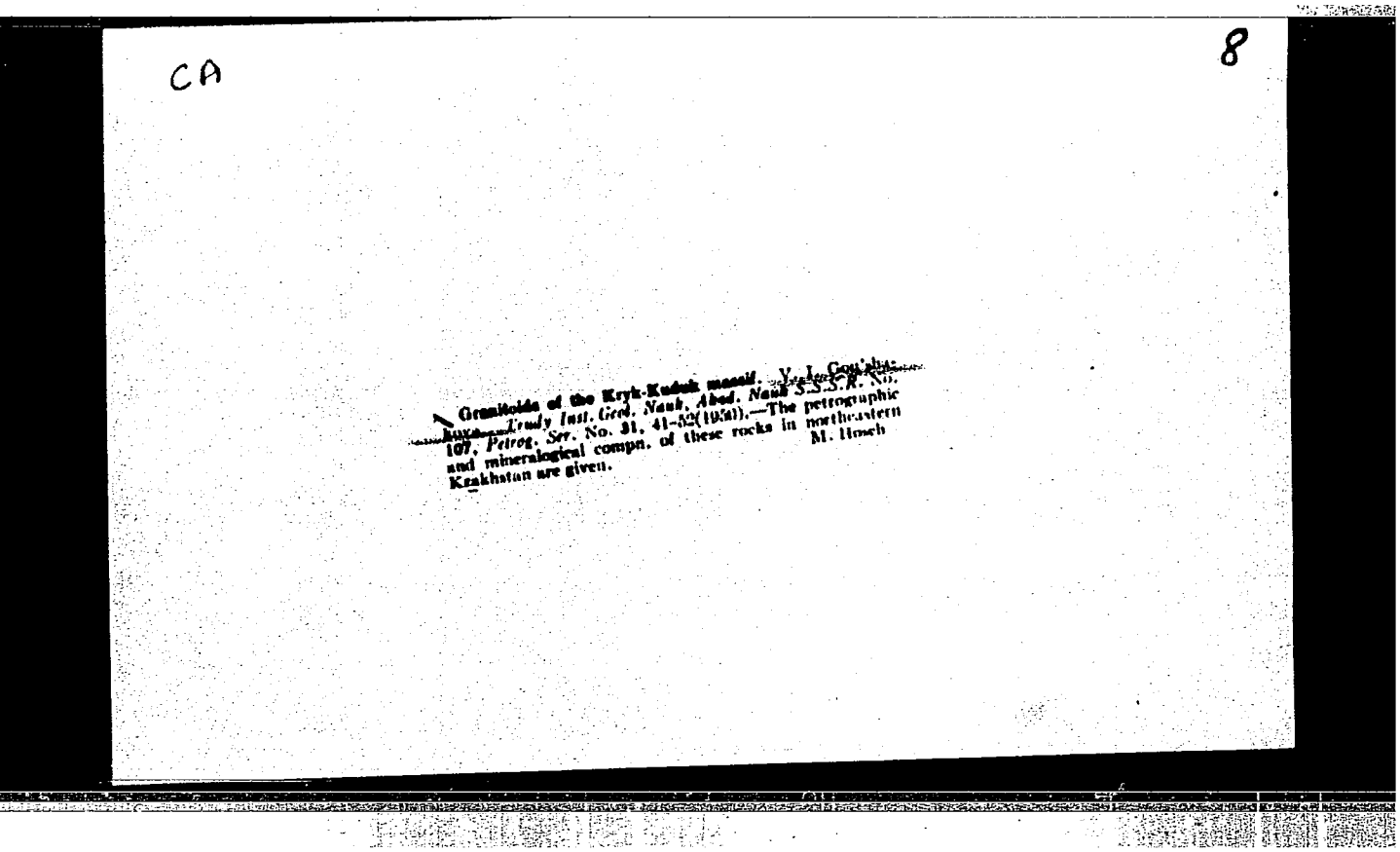
Improvement in the method for producing p-nitrophenylchloromethylcarbinole. Med.prom. 13 no.3:20-21 Mr '59. (MIRA 12:5)

1. Institut organicheskoy khimii AN USSR i Kiyevskiy khimiko-farmatsevticheskiy zavod imeni M.V.Lomonosova.
(METHANOL)

KOROVYAKOV, I.A.; NELYUBIN, A.Ye.; RAYKOVA, Z.A.; KHORTOVA, L.K.; GON'SHAKOVA, V.I., nauchnyy red.; POSPELOVA, A.M., red.izd-va; IYERUSALIMSKAYA, Ye., tekhn.red.

[Origin of Noril'sk trap intrusions bearing sufide copper-nickel ores.] Proiskhozhdenie noril'skikh trappovykh intruzii, nesushchikh sul'fidnye medno-nikelevye rudy. Moskva, Gosgeoltekhizdat, 1963. 100 p. (Moscow. Vsesoiuznyi nauchno-issledovatel'skii institut mineral'nogo syr'ia. Trudy, no.9). (MIRA 17:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya (for Korovyakov, Nelyubin, Raykova, Khortova).



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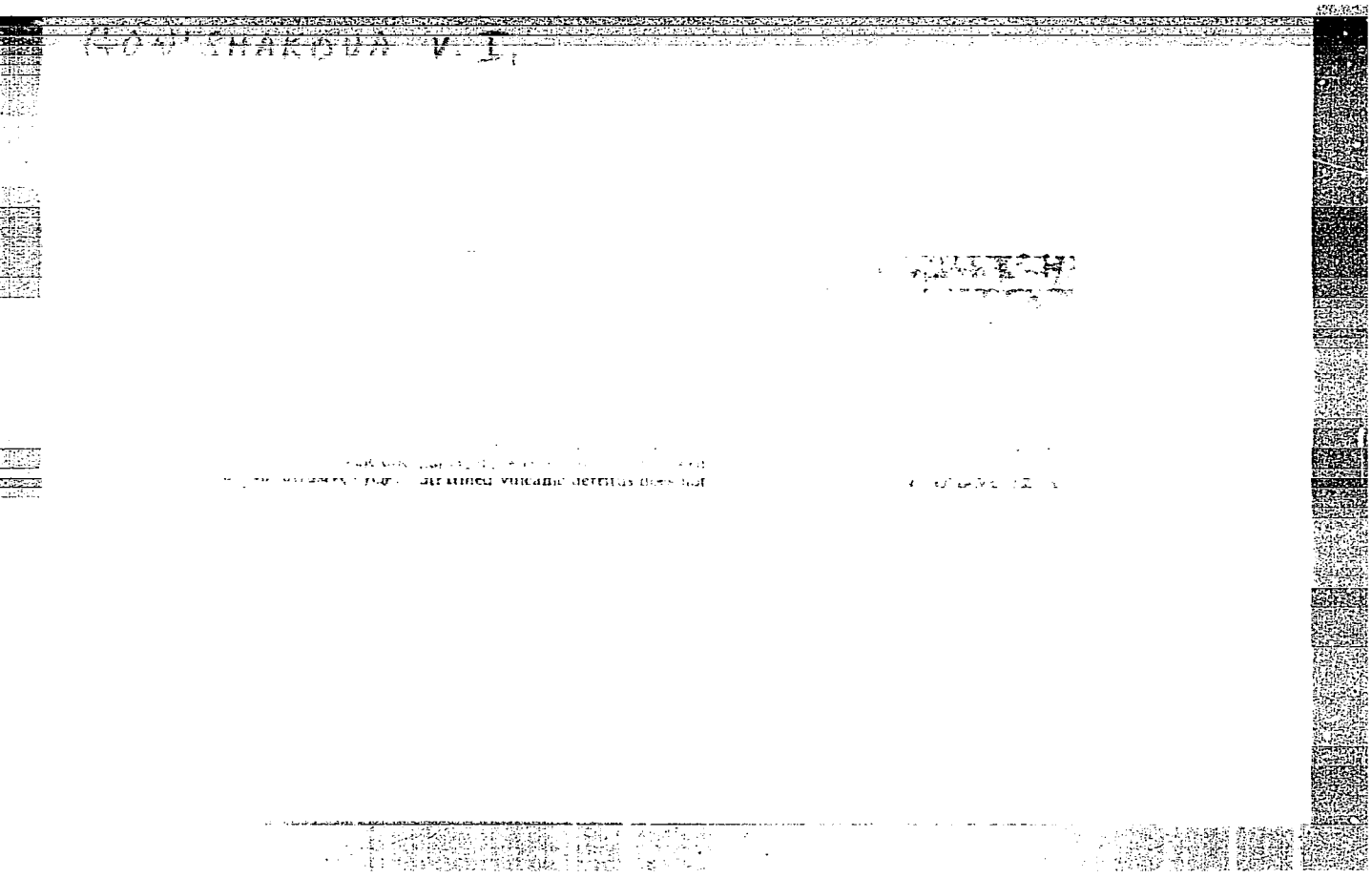
Granitoids of the Kryk-Kuduk massif. V. I. Gorshkov. *Trudy Inst. Geol. Nauk, Akad. Nauk S.S.S.R.* No. 107, *Petrog. Ser.* No. 31, 41–52(1951).—The petrographic and mineralogical compn. of these rocks in northeastern Kzakhstan are given.

M. Hirsch



GON'SHAKOVA, V.I.

Trapp of the Angara-Ilim region (southwestern part of the Siberian Platform). Trudy Inst.geol.nauk no.147:3-27 '53. (MLRA 7:3)
(Angara-Ilim region--Basalt) (Basalt--Angara-Ilim region)

GON'SHAKOVA, V.I.

Effusive rock of the Lower Paleozoic in the region of Chingis-Tau.
Trudy Inst.geol.nauk no.147:28-54 '53. (MLRA 7:3)
(Chingis-Tau--Rocks, Igneous) (Rocks, Igneous--Chingis-Tau)

GON'SHAKOVA, V. I.

USSR/Geology

Card : 1/1 Pub. 46 - 7/16

Authors : Gon'shakova, V. I.

Title : Certain data about the relation between trappean volcanism and tectonics on the Siberian platform

Periodical : Izv. AN SSSR. Ser. geol. 4, 115 - 117, July - August 1954

Abstract : Geological data about the connection between trappean volcanism and the tectonics of the area bordering the Lena, Peleduy and Dzherba Rivers on the Siberian platform. Nine USSR references (1932 - 1951).

Institution : ....

Submitted : October 6, 1953

GON'SHAKOVA, V.I.

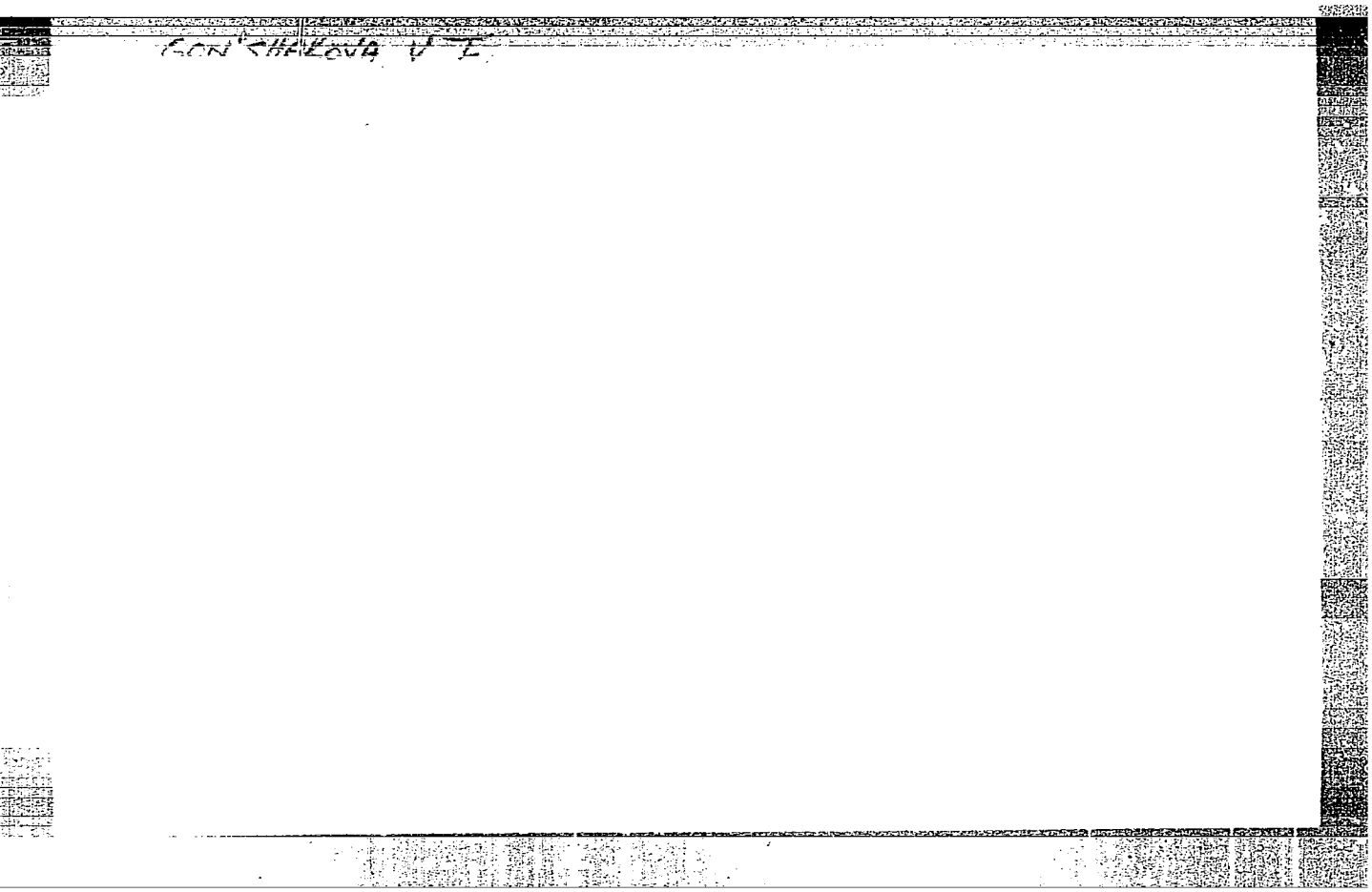
A case of contact effect of trapps on limestones of the lower Cambrian. Dokl.AN SSSR 94 no.3:553-556 Ja '54.
(MLRA 7:1)

1. Predstavleno akademikom S.I.Mironovym.
(Peledui river--Petrology) (Petrology--Peledui river)

GON'SHAKOVA, V.I.

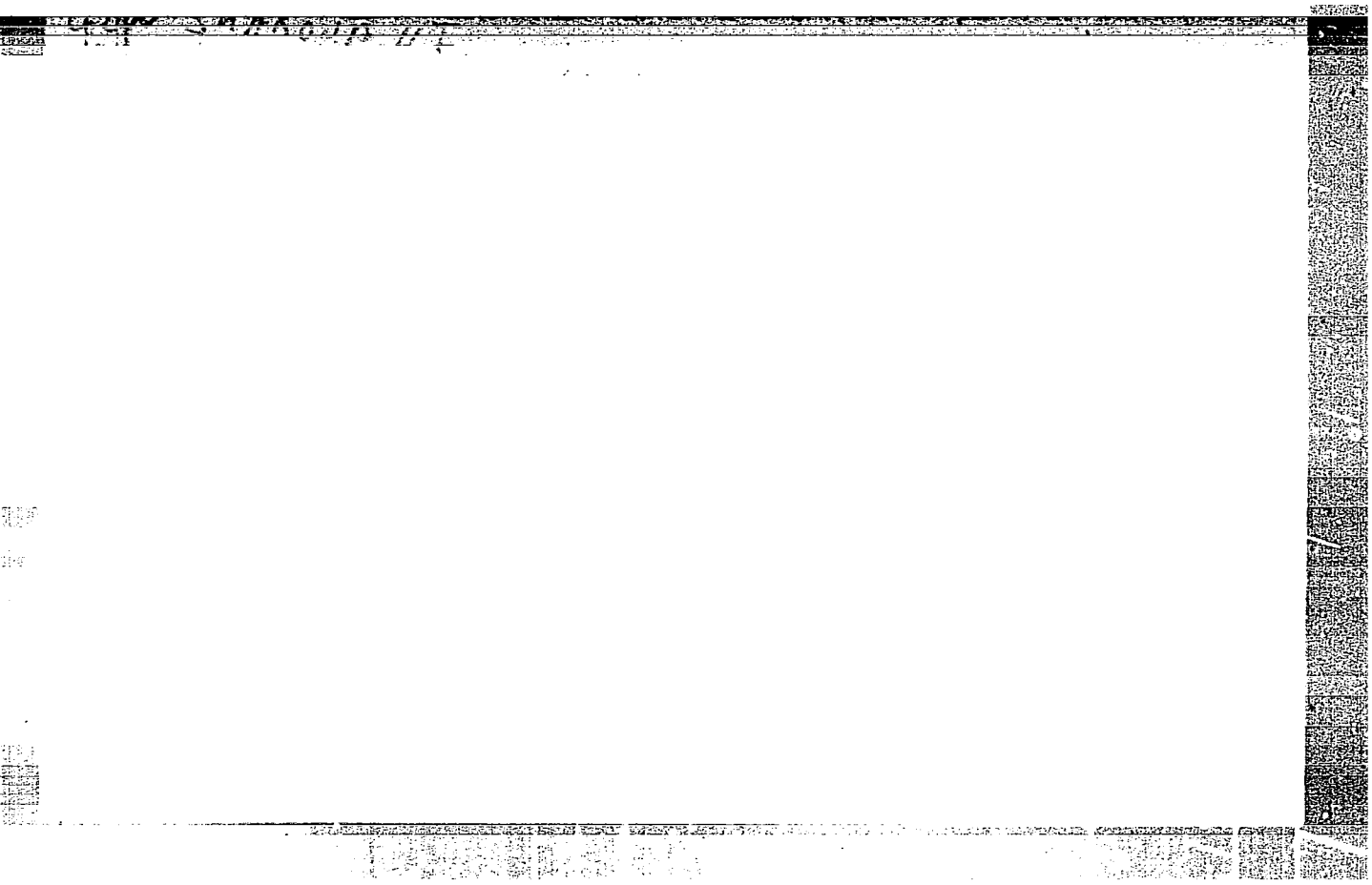
Evidence of trappean volcanism occurring in the late Lower Jurassic period found in the Siberian Platform. Dokl.AN SSSR 95 no.4:857-859 Ap '54. (MLRA 7:3)

1. Institut geologii Vostochno-Sibirskogo filiala Akademii nauk SSSR. (Siberian Platform--Geology, Stratigraphic)
(Geology, Stratigraphic--Siberian Platform)



GON'SHAKOVA, V.I.

Palagonitic amygdaloid diabases of the western Vilyui depression. V. I. Gon'shakova (East-Siberian Filial, Acad. Sci. U.S.S.R., Irkutsk). *Zapiski Vsesoyus. Mineralog. Obshchestva* 84, 332–40(1955).—The diabases occur either in a porphyritic or in a microdiabasic facies, in marine Jurassic sediments; the dikes are 10–100 m. in thickness. The amygdules of 2 mm. to 5 cm. in diam. are normally filled with calcite, opal, or zeolites (analcime and natrolite). Xenoliths of sandstone and of Silurian dolomite marls often are disseminated through the rock of a few cm. to 2 m. in diam.; they are strongly impregnated with quartz and calcite. Chlorophacite and palagonite are everywhere dispersed in veinlets of 1 mm. to 5 cm. in thickness, of black color, with an Fe_2O_3 content of 11–26% but low in CaO (0.78–3.5%). The palagonite is usually observed between the grains of plagioclase and pyroxene or on the walls of the calcite-zeolite-filled amygdules as a thin film. In the porphyritic diabase (with phenocrysts of bytownite and even anorthite compn.) a chloritic mineral is often formed, especially in the central parts of the amygdules, surrounded by pale-green palagonite. The pyroxenes are clinoenstatite-diopside or clinoenstatite-pigeonite; occasionally a hortonolitic olivine (with 57% Fe_2SiO_4, $2V = -71°$) occurs. The palagonite is partly isotropic, partly anisotropic, with n variable between 1.531 and 1.539, but also 1.557 is occasionally observed; usually it is deep-brown in color. The high contents in H_2O of the palagonites indicate the late-magmatic origin of such glasses. Chlorophacite is also high in H_2O and Al_2O_3, but low in SiO_2 and alkalies. Palagonite filling the amygdules often shows the channels through which the late-magmatic solns. have filled up the central parts with calcite or analcime. W. Fiedl



APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000516020004-3"

AUTHOR: Gon'shakova, V.I. SOV-11-58-8-4/14

TITLE: Specific Features of Occurence and Progress of Intrusions of Traps in the South-East Part of Siberian Plateau (Nekotoryye osobennosti razmeshcheniya i mekhanizma vnedreniya trappovykh intruziy v yugo-vostochnoy chasti Sibirskoy platformy)

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya Geologicheskaya, 1958, Nr 8, pp 38-56 (USSR)

ABSTRACT: The south-east part of the Siberian plateau is composed of five basic structural elements: 1) The Angara-Lena Lower Paleozoic depression; 2) the south-west part of the Vilyuy syneclize; 3) the north-east extremity of the Baykal folded zone; 4) the Berezovka depression and 5) the north slope of the Aldan anteclise. The unusual structure of the whole region caused a predominant development of both dyke-like and blanket-like formations. The process of formation of these trappean intrusions was different for each of the five parts. Parts with only slightly dislocated plateau cover and with a crystallic foundation disposed near the surface (the Aldan anteclise) possess highly developed dyke bodies associated with numerous disjunctive disturbances, usually forming large zones stretching in a north-eastern direction. Ruptures, in

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Specific Features of Occurence and Progress of Intrusions of Traps in the South-East Part of Siberian Plateau

the form of faults, and stretched fractures, through which the basic magma intruded, were formed simultaneously with the post-Cambrian deformations of the Archeian and Cambrian strata. In the part of the plateau characterized by peculiar folded formations and by powerful Upper Cambrian and Ordovician sedimentary layers (Angara-Lena depression), trappean intrusions are absent from the south-west part of the depression and found in its more elevated north-western part. In the northern areas of the depression, where the sedimentary blanket formation is less important and only slightly dislocated, trappean formations are numerous and of varied form. Powerful trappean blanket formations are also found in the north-east extremity of the Baykal folded zone. The largest varieties and forms of trappean intrusions are found along the lines of junction of the five enumerated parts. These trappes belong to different eras of formation and their complex nature is the result of different tectonic movements connected with volcanic processes. In the Berezovka depression, the trappean blanket formations are found at a depth varying from 500 to 2,000 m. Slightly sloping dykes, ob-

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