BELKIN, Aleksandr Stepanovich, inzh.; GRIBKOV, V.A., inzh., retsenzent; SOBAKIN, V.V., inzh., red.; KHITROVA, N.A., tekhn. red.

[Handbook on switching engines, automatic, and motorcars] Spravochnik po motovozam, avtodrezinam i motodrezinam. Izd.2., ispr. i dop. Moskva, Transzheldorizdat, 1963. 190 p. (MIRA 16:5)

(Locomotives) (Railroad motorcars)

L 40950-65

ACCESSION NR: AP5006588 S/0142/64/007/006/0679/0683

AUTHOR: Belkin, B. A.

TITLE: Sonic-and-ultrasonic thyratron-type oscillator

SOURCE: IVUZ. Radiotekhnika, v. 7, no. 6, 1964, 679-683

TOPIC TAGS: sonic oscillator, ultrasonic oscillator, thyratron oscillator

ABSTRACT: A single-thyratron continuous-wave sonic-and-ultrasonic oscillator is theoretically considered. Differential equations are written for an equivalent circuit where the thyratron is replaced by a key (gate). Formulas for voltages and currents in the oscillatory circuit are developed. A formula for the amplitude of oscillations is derived from periodicity and energy balance conditions in the system. Possible error is graphically (fig 3) evaluated. Orig. art. has: 3 figures and 20 formulas.

ASSOCIATION: none

SUBMITTED: 16May63 ENCL: 00 SUB CODE: EC

NO REF SOV: 004 OTHER: 000

Card 1/1

L 41367-65 EWT(1)/EWA(h) Pn-4/Pab/Pl-4

ACCESSION NR: AP5005353 S/0109/65/010/002/0362/0364

AUTHOR: Belkin, B. A.

TITLE: Transient process in a pulse-controlled oscillator

SOURCE: Radiotekhnika i elektronika, v. 10, no. 2, 1965, 362-364

TOPIC TAGS: pulsed oscillator, thyratron oscillator

ABSTRACT: The problem of the transient process in a pulse-controlled thyratron oscillator arises when a pulse-packet envelope is evaluated. Equations describing the onset and termination of a single oscillation are set up, and new initial conditions for each successive cycle are found. Relative oscillatory voltages were calculated on a "Minsk" computer for the first 60 cycles for various circuit parameters: the corresponding curves are presented. "The author wishes to thank D. V. Agevev and V. Ya. Smorgonskiy for theif attention to this work." Orig. art. has: 2 figures and 6 formulas.

ASSOCIATION: Gor'kovskiy politekhnicheskiy institut (Gor'kiy Polytechnic Institute)

SUBMITTED: 17Feb64 ENCL: 00 SUB CODE: EC, DP

NO REF SOV: 004 OTHER: 000

Card 1/1

BELKIN, B.A.

Nonsteady process in a keying oscillator. Radiotekh. i elektron. 10 no.2:362-364 F '65. (MIRA 18:3)

BELKIN, B.A.

Oscillation spectrum of a key oscillator. Radiotekh. i elektron. 11 no.1:135-136 Ja '66. (MIRA 19:1)

1. Submitted March 31, 1965.

L 38240-66 EWT(1)

ACC NR: AP6023875 SOURCE CODE: UR/0109/66/011/007/1306/1308

AUTHOR: Belkin, B. A.

31
B

ORG: none

TITLE: Exciting the oscillations in a circuit by a controlled switching element

SOURCE: Radiotekhnika i elektronika, v. 11, no. 7, 1966, 1306-1308

TOPIC TAGS: electromagnetic wave oscillator, very low frequency, oscillator strength, oscillator theory, thyratron

ABSTRACT: Theoretical considerations regarding the very-low-frequency oscillator 25 excited by a thyratron are set forth. The oscillations can sustain if these two conditions are met: (1) The sum of d-c supply voltage and oscillatory voltage exceeds the thyratron firing potential at the starting moment and (2) The firing should be cophasal with the natural oscillations of the circuit. A separately-excited hydrogen TGI1-130/10 thyratron was used in experiments conducted at 11.29 kc and a d-c supply voltage of 200 v. Under quasi-harmonic conditions (the harmonic coefficient less than 3%), the oscillator efficiency was over 90%; under nonharmonic conditions, about 50%. Orig. art. has: 3 figures and 6 formulas. [03]

SUB CODE: 09 / SUBM DATE: 010ct65 / ORIG REF: 002 / ATD PRESS: 5046

Card 1/1 Ab

UDC: 621.385.337.8.018

BELKIN, B.G.

On the probelm of roenten and radiotherapeutic aid in dermatological practice. Vest.derm.i ven. 33 no.5:31-32 S-O '59. (MIRA 13:2)

1. Iz Turkmenskogo nauchno-issledovatel'skogo kozhno-venerologicheskogo instituta (direktor - doktor med.nauk, prof. N.F. Rodyakin).
(SKIN DISEASES radiother.)

BELKIN, B.A.; ITKIN, V.A.

Experimental study of a frequency multiplier using a pulsed mode of self-oscillator operation. Elektrosviaz' 19 no.10:75-77 O '65. (MIRA 18:12)

1. Submitted Jan. 25, 1965.

BELKIN, B.G.

Medical care for patients with dermatomycosis in Ashkhabad. Zdrav. Turk. 4 no.6:30-33 N-D '60. (MIRA 14:1)

1. Iz Turkmenskogo nauchno-issledovatel'skogo kozhno-venerologicheskogo instituta (dir. - prof. N.F. Rodyakin) i Ashkhabadskogo gorodskogo kozhno-venerologicheskogo dispansera (glavnyy vrach - I.D. Leyvi).

(ASHKHABAD--DERMATOMYCOSIS)

BELKIN, B.G.

Injuries from X-rays used for a therapeutic and diagnostic purpose. Zdrav. Turk. 7 no.5:19-21 (41) May '63. (MIRA 16:8)
(X RAYS--PHYSIOLOGICAL EFFECT)

[illegible], B. G.

Dissertation: "Measurement of Nonlinear Distortions in Loudspeakers." Cand Tech Sci, All-Union Sci Res Cinephotographic Inst, 27 May 54, Vechernyaya Moskva, Moscow, 17 May 54.

SO: SUM 284, 26 Nov 1954

Belkin, B. G.

MYASISHCHEV, V.I., redaktor; ALEKSANDROVA, A.A., redaktor; BELKIN, B.G., [translator]; GRIGOR'YEV, V.S., [translator]; ISAKOVICH, M.A., [translator]; KORUZHEV, N.N., tekhnicheskiy redaktor

[Physics of sound in the sea. Translated from the English] Fizicheskie osnovy podvodnoi akustiki. Perevod s angliiskogo B.G.Belkina, V.S.Grigor'eva, i M.A.Isakovicha. Moskva, Izd-vo "Sovetskoe radio," 1955. 739 p. (MLRA 9:2)
(Underwater acoustics)

BELKIN, B. G.

"New Generator (Oscillator) for Acoustic Measurements".

Scientific Research Cinephotographic Institute

A report delivered at a conference on electro-acoustics held by the Acoustic Commision, the Acoustic Institute of the AS, USSR, and the Kiev Order of Lenin Polytechnic Inst., from 1-5 July 1955 in Kiev.

SO: Sum 728, 28 Nov 1955

Akusticheskii Zhurnal, vol. 1, No. 1, 1955

B. J. BELKIN: On the measurement of nonlinear distortion in loudspeakers by the [illegible] method 12

Abstract: The nonuniformity of frequency [illegible] of loud speakers makes difficult the application of the usual [illegible] distortion measurement. Consequently, in order to estimate [illegible] in loudspeakers, it is proposed to apply audio [illegible] signals to them and to measure the [illegible] of the [illegible] statement of a fixed system at infra-sound [illegible]

Sci. Res. Kino Photo Inst, Moscow

Belkin, B. G.

534.233

1926. CINE-THEATRE LOUD SPEAKER WITH DIFFUSING SOUND LENS. B.G.Belkin.
Akust. Zh., Vol. 1, No. 1, 100-2 (1955). In Russian.
Describes a two-band equipment, the h.f. emitter of which has a diffusing sound lens of variable refractive index
C.R.S.Saunders

All-Union Sci Res. Cine-Photo Inst. Acoust

BELKIN, B.G.

Sound lenses with variable refractive indexes. Trudy Kom. po akust. 8:125-138 '55. (MLRA 8:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy kinofotoinstitut
(Sound lenses)

USSR/Electronics - Noise Generators FD-2444

BELKIN, B. G.
Card 1/1 Pub 90-6/11

Author : Belkin, B. G., Active Member, VNORiE

Title : A new noise voltage generator

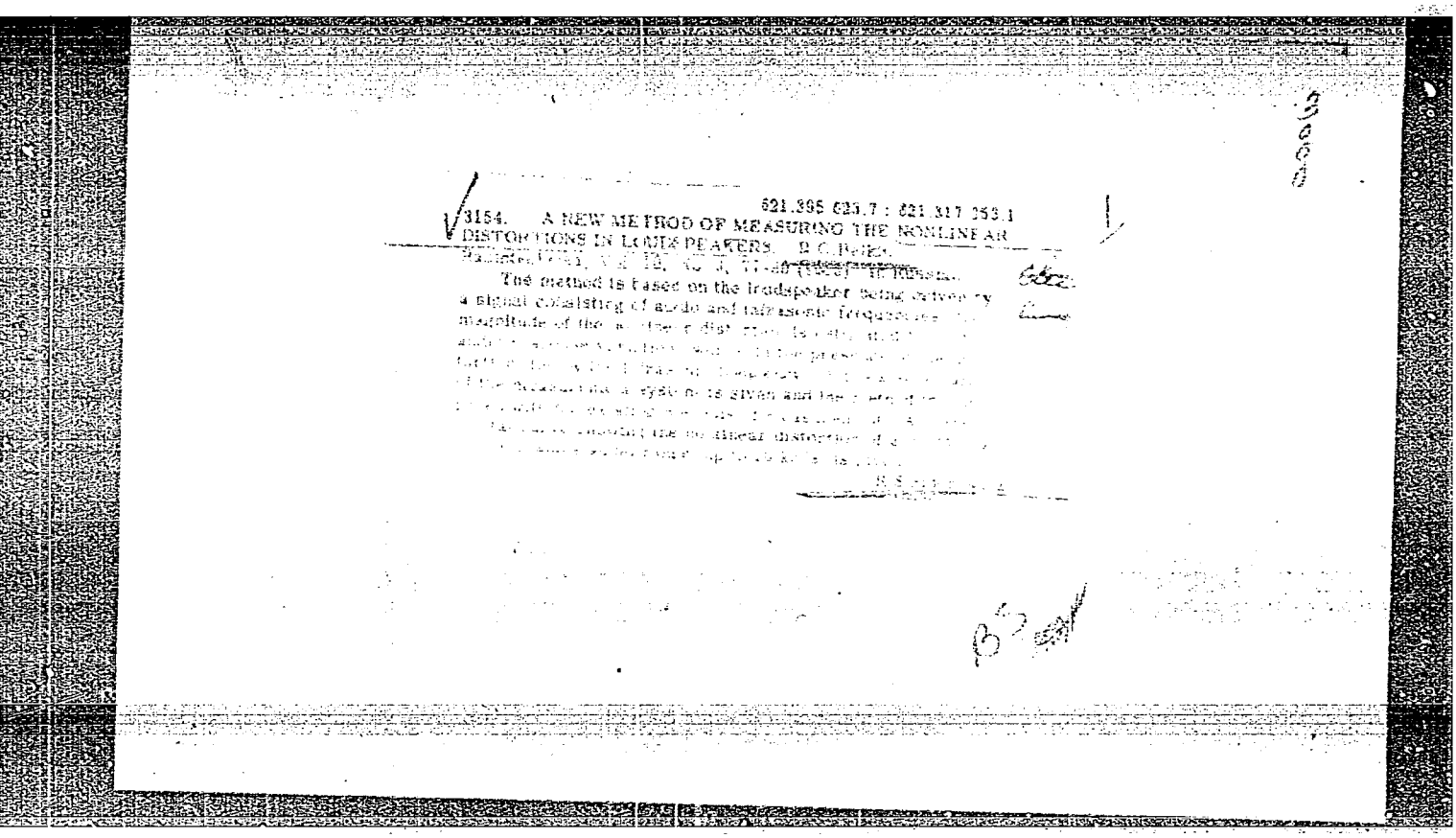
Periodical : Radiotekhnika, 10, 56-58, Apr 55

Abstract : Construction and operation of a noise generator with a predetermined noise band output which shifts continuously through the whole audio spectrum are described in this article. This type of noise generator can be described as a generator of a "sliding" noise band; this sliding effect is obtained by first recording a certain noise band on a film, and then reproducing the noise at various speeds. The mechanism for speed variation uses a rotating hollow cylinder, one of whose faces is cut to a certain profile, which by means of a roller sliding along the profile edge logarithmically varies the speed ratio of a friction coupling between a constant-speed motor and the drive of a film sound track, resulting in frequency variation of the band through the whole width of audio spectrum. The radio between noise band width and mean frequency remains constant. Graphs. Diagram.

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

Submitted : October 21, 1954

Translation 22440 P-TS-9641/V



621.395.625.7 : 621.317.353.1

3154. A NEW METHOD OF MEASURING THE NONLINEAR DISTORTIONS IN LOUDSPEAKERS. [illegible]

The method is based on the [illegible] a signal consisting of audio and [illegible] amplitude of the [illegible]

VEKLENKO, A.F.; BELKIN, B.G.

New types of motion pictures. Tekh.kino i telev. 4 no.6:19-27 Je '60. (MIRA 13:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy kinofotoinstitut.
(Motion pictures)

RAKOVSKIY, Valentin Viktorovich; BELKIN, B.G., kand.tekhn.nauk, Laureat Leninskoy premii, retsenzent; SABASHNIKOVA, Ye.S., red.; MALEK, Z.N., tekhn. red.

[Measurements in sound recording systems for motion pictures] Izmereniia v apparature zapisi zvuka kinofil'mov. Moskva, Izd-vo "Iskusstvo", 1962. 402 p. (MIRA 16:4)

(Motion pictures, Talking--Equipment and supplies)
(Sound--Measurement)

RAKOVSKIY, Valentin Viktorovich; BELKIN, B.G., kand.tekhn.nauk, laureat Leninskoy premii, retsenzent; SABASHNIKOVA, Ye.S., red.; MALEK, Z.N., tekhn. red.

[Measurements in sound recording apparatuses for motion pictures] Izmereniia v apparature zapisi zvuka kinofil'mov. Moskva, Iskusstvo, 1962. 402 p. (MIRA 16:6)
(Motion pictures, Talking--Noise)
(Interference (Sound)--Measurement)

BELKIN, D.G.

Use of ultrasoft X rays in skin diseases. Zdrav. Turk. 7 no.11: 34-36 N'63 (MIRA 17:3)

1. Iz Turkmenskogo nauchno-issledovatel'skogo instituta kozhnykh bolezney (direktor - M.E. Ereshov, nauchnyy rukovoditel' prof. N.F. Rodyakin).

BELKIN, B.G.

Effect of fractional epilation doses of X rays on some reactions of childrens' organisms. Med.rad. 9 no.9:17-21 S '64.
(MIRA 18:4)

1. Turkmenskiy nauchno-issledovatel'skiy institut kozhnykh bolezney.

BELKIN, B.G., kand.med.nauk

Psychogenic reactions in children to simulated irradiation in an X-ray department. Vest. derm. i ven. 38 no.9:37-40 S '64. (MIRA 18:4)

1. Turkmenskiy nauchno-issledovatel'skiy institut kozhnykh bolezney (dir. - kand.med.nauk M.E.Ereshov, zamestitel' direktora po nauchnoy chasti - prof. N.F.Rodyakin), Ashkhabad. Nauchnyye rukovoditeli - chlen-korrespondent AMN SSSR prof. P.V.Kozhevnikov i prof. N.F.Rodyakin.

S/118/61/000/007/002/003
D221/D303

AUTHOR: Belkin, B.P., Engineer

TITLE: Automation of the process of electroplating

PERIODICAL: Mekhanizatsiya i avtomatizatsiya proizvodstva, no. 7, 1961, 10 - 16

TEXT: This article describes the construction and circuits of the automatic controllers of temperature and level of the electrolyte, controllers of cathode current density, controllers of the time of plating and of current reversal. The apparatus PTYЭ-63 (RTUE-63) regulates the temperature of the electrolyte with steam and electric heating in the range of 20-100°C with an accuracy of ± 1°C, and level with an accuracy of ± 5 mm. It is operated from the mains - 220 V a.c. and its power consumption is 300 watts. After describing the basic elements of the temperature controlling circuit with steam heating, the author notes that controller PПT-64 (RPT-64) regulates the cathode current density from 0.2 to 5 amps/

Card 1/6

dm^2 with an accuracy of ± 10 %, the time of plating from 0 to 50 minutes with an accuracy of ± 5 %, the reversal of current with the independent change of time of duration for the cathode period from 5 to 40 sec. and anode period from 0.5 to 4 sec. The minimum controlled bath current is 1-2 amperes, maximum - 200 amperes. The dimensions of the controller are 410 x 650 x 1500 mm, weight 150 kg. Mains supply is a.c. 220 volts; power consumption 1.5 watt. Fig. 3 represents the basic circuit diagram of this controller. The adjustment and control of the current density controller is based on the condition that the total bath current I_o is equal to the given cathode current density D_k over the surface S of the objects being plated. Consequently the cathode current density in the bath is a function of the total current: $D_k = f(I_o)$. The measuring element consists of a receiving part - controlling slabs (transmitters) А connected in parallel and suspended in the bath, and a shunt Ш, a measuring and master part - electronic controller type МРШПР-54 (MRShChPR-54) or type ЭПВ2-11 (EPV2-11). There is no mechanical contact between the controlling and regulating circuits. The ampli-

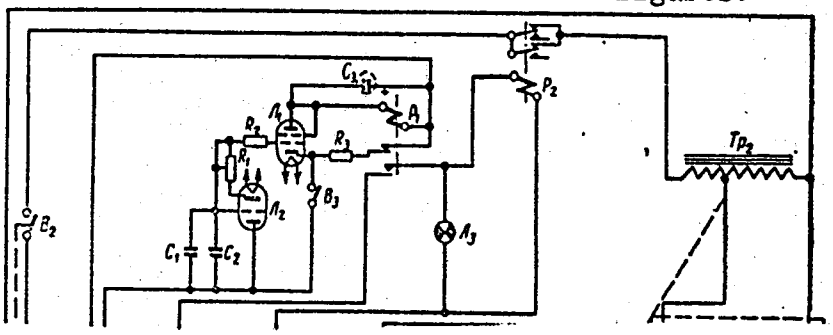
Card 2/6

fier consists of two relays P_3 and P_4 and two contacts of the measuring device K_3 and K_4. ИМ is the operating element. The regulator consists of an autotransformer and a power rectifier ВСГ-3А (VSG-3A). A manual control is also provided. The current density in the bath is set using pushbuttons K_1 and K_2 (current density "less" and "more" respectively). The transmitting elements of this controller are stainless steel rods 6-8 mm in diameter, suspended vertically in the bath. The submerged length of the transmitter is such that its lower end is level with the suspended object or 50-100 mm higher. For baths with the cathode bars 1 m in length, one transmitter per cathode bar is sufficient. Two transmitters are used with the cathode bars of 1 to 2 m in length. The distance between the transmitters, for good control, is so chosen that it is proportional to the space occupied by the objects, measured at right angles to the plane of the cathode bar. The transmitter current is set to a minimum observing that the current density at the transmitter is not below the limiting value. Larger values of current density at the transmitter are avoided to prevent the setting

of the metal on its surface. This controller was proved to hold the required current density with the accuracy of ± 10 % for various loads. The duration of the cathode and anode periods depends on the position of the wipers of R_5 and R_6. The periods can be lengthened by increasing R_5, R_6, C_4 or C_5. The controller of the electroplating time consists among other components of an electronic time relay [triodes $Л_1$, and $Л_2$ of the type 6П1П (6P1P) and 6H2П (6N2P) respectively], a relay P, of the type PCM-2 (RSM-2), a relay P_2, type RP-2. The variable resistance R_1 controls the time interval. When C_1 and C_2 discharge, the anode current of $Л_1$ increases until the relay P_1 operates and its contacts close. This operates the relay RP-2 and thus breaks the circuit of the autotransformer Tp_2 which deenergizes the bath. The apparatus APT-61 (ART-61) is used for the automatic reversal of the current (0.5 to 10 minutes for the cathode period and 0.5 to 17 sec for the anode period) with an accuracy of ± 5% for the current range of 0 to 600 amperes. The dimensions of the apparatus are: 320 x 210 x 180 mm; weight 8 kg; mains 220 V a.c.; power consumption 12 watts. It con-

Automation of the process ...

sists basically of an electronic and a power unit. The electronic unit controls the power unit. It has two time relays. This controller is used in the chromium plating process when one generator supplies power to a group of baths. If only one bath is used, a controller of the type APT-62 (ART-62) can be used. This is a simplified version of ART-61 and operates on the same principle. In the process of chromium plating the recommended temperature of the electrolyte is 50-60°C, cathode current density 60-100 amps)cm^2, length of cathode period 1-5 minutes. There are 8 figures.



Card 5/6

L 31127-66 EWA(h)/EWT(1)

ACC NR: AP6010878 SOURCE CODE: UR/0115/66/000/002/0092/0093

AUTHOR: Belkin, B. P.

ORG: none

TITLE: Pulse-parameter checker

SOURCE: Izmeritel'naya tekhnika, no. 2, 1966, 92-93

TOPIC TAGS: pulse checker, pulse analyzer

ABSTRACT: The development of a new instrument for converting electric pulses into d-c voltages proportional to the repetition frequency, pulse height, or pulse duration is reported. The transistorized instrument (its principal diagram is given) can be used for three measurements: (1) The repetition frequency is measured by converting the train of height-and-duration-normalized pulses into a d-c voltage; it is claimed that a height variation of 10--100 v and a duration variation of 0.1--5 μsec have no effect on the output voltage; (2) In pulse-height measurements, a duration variation of ± 100% or a frequency variation of ± 100% within 1000--1500 cps causes an error of 2--3%; if the frequency lies in the 500--1000-cps band, the error increases to 2--7%; (3) In pulse-duration measurements, a repetition-frequency variation of ± 100% (within 100--1500 cps) causes an error of 2--3%; a height variation of 10--100 v does not affect the accuracy. "Engineer A. A. Pershin took part in the development of the instrument." Orig. art. has: 1 figure. [03]

SUB CODE: 09 / SUBM DATE: none / ATD PRESS: 4239

Card 1/1

UDC: 621.317.726

BELKIN, B.P., inzh.

Automatic regulation of temperature and electrolyte level of electrolytic baths. Mekh. i avtom. proizv. 17 no.4:10-13 Ap '63. (MIRA 17:9)

BELKIN, B.P., inzh.; SHLUGER, M.A., doktor tekhn. nauk

Automatic regulation of electric conditions in chromium plating baths. Mekh. i avtom. proizv. 18 no.7:2-4 Jl '64. (MIRA 17:9)

LIPIN, A.I.; BELKIN, B.P.

Automatic control and regulation of electrolysis conditions. Biul. tekh.-ekon. inform. Gos. nauch.-issl. nauch. i tekh. inform. 17 no.9:93-96 S '64 (MIRA 18:1)

BELKIN, G.

36036 Organizatsiya finansovoy raboty na zavode. Moloch prom-st', 1949, No.11, s. 37-40.

SO: Letopis' Zhurnal'nykh statey, Vol. 45, Moskva, 1949

BELKIN, G.

Setting prices on livestock and meat products. Mias. ind. SSSR 29 no.5:42-43 '58. (MIRA 11:10)
(Meat--Prices)

BELKIN, G.

The workers' committee is the organizer of progressive practice. Sov. profsoiuzy 17 no.8:26-27 Ap '61. (MIRA 14:3)

1. Zaveduyushchiy orgmassovym otdelom Smolenskogo oblastnogo soveta profsoyuzov.
(Smolensk Province--Trade unions)
(Smolensk Province--Stock and stockbreeding)

BELKIN, G.

Contribution to the national task. Prof.-tekh. obr. 18 no.7: 16-17 Jl '61. (MIRA 14:7)

1. Zamestitel' nachal'nika Stalingradskogo oblastnogo upravleniya professional'no-tekhnicheskogo obrazovaniya.
(Stalingrad Province--Farm mechanization--Study and teaching)

BELKIN, G. L., SOTNIKOV, V. A.

"The Control of the Contents of Lead in Intermediate Products and Concentrates"

paper presented at the All-Union Seminar on the Application of Radioactive Isotopes in Measurements and Instrument Building, Frunze (Kirgiz SSR), June 1961)

So: Atomnaya Energiya, Vol 11, No 5, Nov 61, pp 468-470

ZVYAGINTSEV, D.F., kapitan, voyenny letchik vtorogo klassa; BELKIN, G.N., kapitan, voyennyy shturman pervogo klassa

How we carry out aerial reconnaissance. Vest.Vozd.Fl. no.8:33-37 Ag '60. (MIRA 13:9)
(Aeronautics, Military--Observations)

BELKIN, G.S.; KISELEV, V.Ya.

Erosion of electrodes in high current discharges in rarefied media at atmospheric pressures. Trudy MEI no.64:261-270 '65.
(MIRA 19:1)

L 23486-66 EWT(m)/EWP(t) IJP(c) JD/WB
ACC NR: AP6007092 UR/0057/66/036/002/0384/0389

AUTHOR: Belkin,G.S.; Kiselev,V.Ya.

ORG: Moscow Order of Lenin Power Engineering Institute (Moskovskiy ordena Lenina energeticheskiy institut)

TITLE: Electrode erision in high-current pulsed discharges

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 2, 1966, 384-389

TOPIC TAGS: spark gap, spark discharge, electrode, erosion

ABSTRACT: The authors have investigated erosion of copper electrodes in oscillating discharges with periods from 35 to 200 microsec, damping constants from 5.9×10^3 to 57×10^3 sec^{-1}, and maximum currents from 70 to 800 kA. The mass of metal ejected from the electrodes was determined by weighing the electrodes before and after the discharge. The electrodes were surrounded by a metal screen on which the ejected metal was deposited. By examining the deposit on this screen it was possible to determine that 85-90% of the ejected metal came off as liquid and only 10-15% as vapor. The mass of ejected metal was found to be proportional to the integral over the full discharge time of the absolute value of the current, provided this integral exceeded a threshold value of about 10 coulombs. The mass of electrode metal melted in the discharge is calculated; comparison of this calculated result with the observed electrode erosion showed that approximately 40% of the molten electrode metal is ejected, independently of the

Card 1/2 UDC: 537.523.4

L 23486-66
ACC NR: AP6007092

magnitude of the discharge. A formula is given with which one can calculate the mass of electrode metal lost in the discharge of a capacitor from the initial charge on the capacitor, the potential drop at the electrode, the melting temperature of the electrode metal, and the characteristics (damping constant) of the oscillating circuit. Electrode erosion can be reduced by reducing the inductance of the discharge circuit. Orig. art. has: 15 formulas and 4 figures.

SUB CODE: 20/ SUBM DATE: 03May65/ ORIG REF: 005/ OTH REF: 000

Card 2/2 UVR

BELKIN, I.G. (Baku); PANAYOTI, B.N. (Baku)

Bases of a method of combined derivatives. Avtom. i telem. 26 no.3:548-550 Mr '65. (MIRA 18:6)

VINOGRADOV, G.V., doktor khimicheskikh nauk; BELKIN, I.M.; KONYUKH, I.V.

Methods for studying the rheological (viscosity) properties of polymer solutions and melts. Zhur.VKHO 6 no.4:417-421 '61. (MIRA 14:7)

(Polymers) (Rheology)

BELKIN, I. M.

Dissertation defended for the degree of Candidate of Technical Sciences at the Institute of Hetrochemical Synthesis: in 1962:

"Investigation of Polymer Melts Using the Method of Rotational Viscosimetry."

Vest. Akad. Nauk SSSR. No. 4, Moscow, 1963, pages 119-145

BELKIN, G.YA.

"Handbook for a Veterinary Assistant." Under the general editorship of G.Ya. Belkin. Second revised and supplemented edition. Chkalov. Chkalov Publishing House, 1952. 676 pages with illustrations. Price 14 rubles,10 kopeks,bound.10,000 copies.
SO: Veterinariya;Vol.30;No. 3;March 1953;unclassified TABCON

BELKIN, I.

On-Radio Station, Murmansk, Murmanskaya O.

N: Polyarnaya Pravda,
Murmansk, 30 May '44

IBRAGIMOV, I.E.; MELIK-SHAKHNAZAROV, A.M.; SHAYN, I.L.; SHIKIN, I.G.

Electronic model of an automatic a.c. compensator in rectangular coordinates. Izv. AN Azerb.SSR.Ser.fiz.-mat. i tekh. nauk no.4: 25-32 '61. (MIRA 14:12)
(Electronic apparatus and appliances—Models)
(Measuring instruments)

BELKIN, I. I.

PTITSYN, G.V., inzhener; BELKIN, I.I., inzhener.

Automatic control system for RVZ-55 streetcars with mixed excitation electric meters. Vest. elektroprom. 28 no.3:59-62 Mr '57. (MIRA 10:4)

1. Zaved "Diname".
(Electric railway meters) (Automatic control)

BELKIN, I.I., inzh.

Features of the electric equipment and circuitry of the new E-type subway car. Vest. elektroprom. 31 no.11:11-16 N '60.
(MIRA 13:12)

(Subways--Cars)

BELKIN, I.M.; ROMANTSEVA, L.M.; SUKHANOVA, V.A.; GOLOSHCHEPOV, I.M., red.

[Plastics in armored equipment] Plastmassy v bronetankovoi tekhnike. Moskva, Voenizdat, 1965. 136 p. (MIRA 18:9)

15.8500

28937 S/063/61/006/004/004/010
A057/A129

AUTHORS: Vinogradov, G. V., Doctor of Chemical Sciences, Belkin, I. M., Konyukh, I. V.

TITLE: Method for studying rheological (viscous) properties of polymer solutions and melts

PERIODICAL: Zhurnal vsesoyuznogo khimicheskogo obshchestva imeni D. I. Mendeleyeva, v. 6, no. 4, 1961, 417-421

TEXT: A short review of methods for studying rheological properties of polymers by investigating viscosity characteristics of solutions or melts is given in the present paper. After discussing principal aspects for these methods, capillary and rotational viscosimetry is described. Some new testing methods and devices developed in the Institut neftekhimicheskogo sinteza AN SSSR (Institute of Petrochemical Synthesis of the Academy of Sciences USSR) are also presented. Viscosity η is expressed by Newton's equation as $\tau = \eta D$ (1) (τ = shear stress, D = rate gradient). Rheological characteristics of fluid systems were determined by the form of the fluidity curve $\tau = f(D)$ and the values of the parameters. In non-Newtonian liquids η depends on D and τ, thus

Card 1/4

by determining the latter the viscosity can be estimated by means of absolute viscosimeters. Two types of viscosimeters were generally used, viz., capillary and rotational viscosimeters. The latter are especially convenient for great D values. Capillary viscosimeters operate in the range of $D = 10^{-2} - 10^{6}$ sec, and $\tau = 10 - 10^{7}$ dyne/cm^2. To avoid "outlet effects", devices with two capillaries of different length but equal diameter were used. Constant pressure is secured by a weight pressing on a piston which floats on the polymer system. Compressed gas or extruders can also be used to effect the pressure. In the Institute of Petrochemical Synthesis a load-type microviscosimeter (Fig. 1) is used for polymer melts, a gas viscosimeter with constant pressure for melts and concentrated solutions of polymers, and a spring viscosimeter with variable consumption and pressure for solutions [АКВ-2а (AKV-2a) type] and melts [АКВ-5 (AKV-5) type]. A device identical to the viscosimeter in Fig. 1 was developed by I. A. Marakhonov in the NIIPPlastmass (Leningrad). Small amounts of the polymer can be investigated in this microviscosimeter. The gas capillary viscosimeter contains several cylindrical removable reservoirs of different volume with floating pistons. The latter are connected to the manometric panel at one end, and at the other to the pressure regulator, manostate and cylinder with inert gas at 150 atm pressure. Also a set of calibrated cylindrical

Method for studying rheological ...

capillaries of different length and diameter is used with the viscosimeter. All the three types of viscosimeters mentioned can be used up to 350°C. Rotational viscosimeters can be used in the determination of relaxation and elastic characteristics of polymer systems for studying the Weissenberg effect or the estimation of the transitions from elastic deformations to fluidity. On these devices the intervals of $D = 10^{-8}$ to 10^{5} sec and $\tilde{\tau} = 10^{-4}$ to 10^{7} dyne/cm^2 can be measured. Generally devices with coaxial cylinders were used. Many modern rotational viscosimeters have electronic mechanisms for registration and regulation or programmed changes of D. A viscosimeter of the cone-plane type (Fig. 2) was developed in the Institute of Petrochemical Synthesis for investigations of concentrated solutions or melts of polymers in inert gas atmosphere or high vacuum at temperatures of up to 300°C. One friction surface is the bottom of the rotating cup 4 and the other the plane of the cone 3. The rotation of the latter, effected by the polymer 5, is controlled by tensiometric or inductive gages. By means of a servo mechanism (which controls the hydraulic drive 10) changes in the rate of rotation of the cup 4 can be programmed. By a quick stop of the latter the relaxation of stresses can be determined. Some typical curves obtained with high-pressure polyethylene at 220°C are shown in Fig. 3. Curves OAB demonstrate the dependence of the shear stress on deformation (diagrams 1-4;

Card 3/8

Method for studying rheological ...

deformation rates 0.75, 2.1, 2.8 and 21 sec^{-1}, respectively). Curves BC show the process of shear stress relaxation at a momentary stop of deformation in points B. On the flow curve (left upper corner in Fig. 3) the points 1-4 are shown corresponding to the stop on the "stress-deformation" curves. Investigations of concentrated polymer solutions at temperatures below 100° - 120°C are carried out by the present authors on viscosimeters with coaxial cylinders of the type ПВР-1 (PVR-1) described by V. P. Pavlov [Ref. 21: Trudy tretyey Vses. konf. po kolloidnoy khimii (Transactions of the third All-Union conference on colloid chemistry), Izd. AN SSSR, M., 1956, p. 144], and Yu. F. Deynega, V. P. Pavlov and G. V. Vinogradov [Ref. 44: Zav. lab., 26, no. 3, 353 (1960)]. There are 3 figures and 45 references: 13 Soviet-bloc and 32 non-Soviet-bloc.

ASSOCIATION: [Abstracter's note: apparently the Institute of Petrochemical Synthesis is the author's institute.]

Card 4/8

KONYUKH, I.V., BELKIN, I.M., MUSTAFAYEV, E.

Rotation viscosimetry of polymer melts.

Report presented at the 13th Conference on high-molecular compounds
Moscow, 8-11 Oct 62

45157

S/020/63/148/002/032/037
B192/B101

15.8510

AUTHORS: Vinogradov, G. V., Belkin, I. M., Kargin, V. A., Academician

TITLE: High elasticity, shear strength and development of a stationary viscous flow in flowing polymers

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 148, no. 2, 1963, 369 - 372

TEXT: The transition from elastic deformation to the development of a stationary viscous flow in polymers was investigated on the substances Alkathene-2 (polyethylene) and block-polystyrene. With a rotary diffraction viscosimeter the shear stress τ as a function of the deformation γ was measured at various temperatures T for different constant deformation rates $\dot{\gamma}$. Calibration curves $\tau(\gamma)$ at 114, 140 and 195°C with $\dot{\gamma}$ values from 0.028 to 21 sec^{-1} are given for polyethylene. For all selected temperatures the curves at low $\dot{\gamma}$ first rose monotonically with γ and then levelled to a constant value; but, for higher $\dot{\gamma}$ values they rapidly rose to a maximum and then dropped monotonically to a constant value. For the deformation γ_s, where τ turns constant, there holds: $\gamma_s = A + B \log \dot{\gamma}$, B being about

Card 1/2

2 for all temperatures, and A decreasing with rising temperature. For monotonic curves the transition from the solid state to the development of a stationary flow occurs without a change in structure, for curves with a maximum, a change in structure takes place when passing the maximum. The good reproducibility of the calibration curve when the experiments are repeated, as well as the fact of the energy of activation being almost the same both at the limit of resistance and when the flow becomes stationary, lead to the conclusion that the change in structure is reversible and unattended by any destruction of the macromolecules. The modulus of rigidity G was ascertained from the rise of the curves $\tau(\dot{\gamma})$ at $\tau = 0$. For small $\dot{\gamma}$, there resulted the functionality $G = a + b.\log \dot{\gamma}$, where b = 4 for polyethylene in the temperature range investigated, b = 8 for polystyrene at 160°C, b = 2.5 at 210°C. With rising $\dot{\gamma}$, $G(\dot{\gamma})$ makes a distinct kink for the value of $\dot{\gamma}$, corresponding to a maximum appears in the curves $\tau(\dot{\gamma})$, and turns constant where the substance enters the field of high elasticity. There are 4 figures.

SUBMITTED: June 12, 1962

Card 2/2

ACCESSION NR: AP4020053 S/0032/64/030/003/0364/0367

AUTHORS: Vinogradov, G. V.; Belkin, I. M.; Konstantinov, A. A.; Krasheninnikov, S. K.; Rogov, B. A.; Malkin, A. Ya.; Konyukh, I. V.

TITLE: Rotational elastoviscosimeters for studying polymers

SOURCE: Zavodskaya laboratoriya, v. 30, no. 3, 1964, 364-367

TOPIC TAGS: viscosimeter, elastoviscosimeter, disk cone viscosimeter, polymer strain, polymer shear stress, viscosity measurement, viscosimeter PVR 1, viscosimeter KRPD, microviscosimeter MV 2

ABSTRACT: An elastoviscosimeter of the disk-cone type shown in Fig. 1 on the Enclosures is described. For this configuration the strain rate and shear stress are determined by the equations

$$\dot{\gamma} = \frac{\omega}{\varepsilon} \text{ sec}^{-1},$$

and

$$\tau = \frac{2}{3\pi} \frac{1 - \varepsilon^3/2}{R^3} M, \text{ dynes/cm}^2;$$

Card 1/4

ACCESSION NR: AP4020053

(where N is the applied torque). The schematic of the complete test facility is shown in Fig. 2 on the Enclosures. This apparatus permits measurements on materials with a viscosity of $10\text{-}10^{10}$ poises at temperatures of -30 to 300C in air, in vacuum ($\sim 10^{-3}$ mm Hg), or in an inert atmosphere. Through a system of gear boxes the speed can be continuously varied over a range of 10^8. The RPM is measured by a generator, and it and various temperatures (measured by thermocouples) can be continuously recorded. The applied torque on the stationary disk 3 is measured by strain gauges mounted at 45° on the cylindrical shaft 4. The results obtained with this apparatus (REV-1) were compared with measurements made in a coaxial-cylindrical viscosimeter (type PVR-1), a capillary viscosimeter (type KRPD) and in a microviscosimeter (type MV-2). The results agreed within 6% in all instances. Orig. art. has: 3 figures and 2 formulas.

ASSOCIATION: Institut neftekhimicheskovo sinteza AN SSSR (Institute of Petrochemical Synthesis AN SSSR)

SUBMITTED: 00 DATE ACQ: 27Mar64 ENCL: 02

SUB CODE: GC, IE NO REF SOV: 008 OTHER: 007

Card 2/4

ACCESSION NR: AP4020053

ENCLOSURE: 01

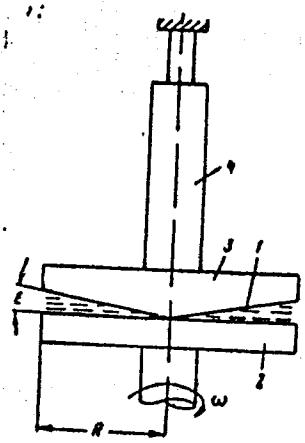


Fig. 1. Schematic of disk-cone viscosimeter

Card 3/4

ACCESSION NR: AP4020053

ENCLOSURE: 02

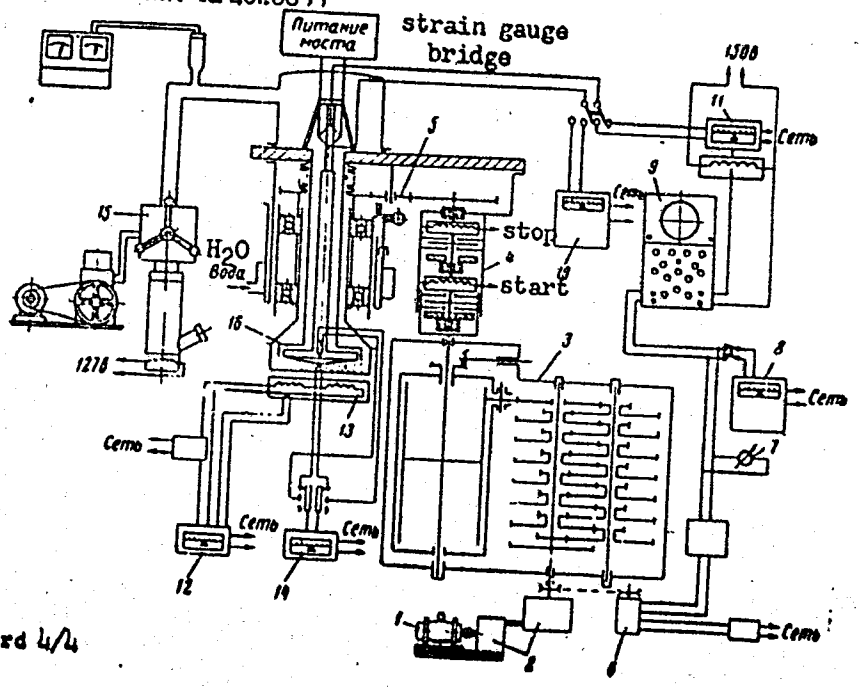


Fig. 2. Schematic of test apparatus REV-1

Card 4/4

L 63837-65 EWT m/EPF(c)/EWP(j)/T WW/RM

ACCESSION NR: AP5020222 UR/0069/65/027/004/0499/0504
541:025:532.135

AUTHORS: Vinogradov, G. V.; Belkin, I. M. 44,55 44,55

TITLE: Rheology of polymers. The elastic strength and viscosity properties of polyethylene in the fluid state

SOURCE: Kolloidnyy zhurnal, v. 27, no. 4, 1965, 499-504

TOPIC TAGS: viscosity, viscous flow, polyethylene, polymer, elastomer, elastic stress / alkatene 2 polymer, PE 500 polyethylene

ABSTRACT: Rheological properties of a representative polymer exhibiting visco-elastic properties in the fluid state were investigated. The experiments were carried out at 114-220C on a rotatory elastoviscometer described by G. V. Vinogradov et al (Zavodsk. laboratoriya 30, 365, 1964). The polymers investigated were alkatene-2 and polyethylene PE-500. The dependence of the shearing stress on the time and the deformation at different deformation rates, the ultimate strength and the shearing stress in the state of steady flow were determined. It was found that an increase in the rate of deformation causes a decrease in the time required to reach the yield point. The activation energy for steady flow and an ultimate shear strength transition are of similar magnitude. The moduli for

Card 1/2

L 63837-65
ACCESSION NR: AP5020222

high elastic shear deformation of molten polymers with unimpaired structure increase with increase in the rate of deformation. It is concluded that the polyethylene melts represent thixotropic liquids of high elasticity. Orig. art. has: 5 graphs.

ASSOCIATION: Institut neftekhimicheskogo sinteza AN SSSR, Moscow (Institute for Petrochemical Synthesis, AN SSSR)

SUBMITTED: 27Jan64 ENCL: 00 SUB CODE: OC, GC

NO REF SOV: 006 OTHER: 011

Card 2/2

BELKIN, I.M.; KRASHENINNIKOV, S.K.

Rotary viscosimetry. Zav. lab. 31 no.2:185-198 '65. (MIRA 18:7)

VINOGRADOV, G.V.; BELKIN, I.M.

Rheology of polymers. Elastic strength and viscous properties of polystyrene in a molten state. Koll. zhur. 27 no.5:668-673 S-O '65. (MIRA 18:10)

1. Institut neftekhimicheskogo sinteza AN SSSR imeni Topchiyeva.

L 27899-66 EPF(c)/EWP(j)/EWT(m) RM
ACCESSION NR: AP5024019 UR/0069/65/027/005/0668/0672
532.135

AUTHOR: Vinogradov, G. V.; Belkin, I. M.

TITLE: Rheology of polymers. Elastic and viscous properties of polystyrene in the fluid state

SOURCE: Kolloidnyy zhurnal, v. 27, no. 5, 1965, 668-672

TOPIC TAGS: steady flow, polystyrene, rheologic property, polymer rheology, viscous flow

ABSTRACT: The object of the work was to investigate the elastic and viscous properties and the process of transition from elastic deformations to steady flow in polystyrene melts. Brand D (GOST 9440-60) block polystyrene was studied in the 2×10^{-2} - 2×10 sec^{-1} range of deformation rates at temperatures from 160 to 210° and residual air pressures of about 10^{-2} mm Hg. An REV-1 rotary elasto-viscometer and the technique of steady deformation rates were employed. The rheological properties were found to be similar to those determined earlier in polyethylene melts, (e.g., nature of the dependence of shear stresses on the time and deformation at various constant deformation rates, etc.) In passing from low to high shear rates, the establishment of steady flow is accompanied by a

Card 1/2

L 27899-66
ACCESSION NR: AP5024019

transition through the ultimate strength of the polymer melts. The activation energy of this transition is close to the activation energy of viscous flow. The transition through the ultimate strength involves a breakdown (reversible with time) of the supermolecular structures in the polymer in shear. It is concluded that high-molecular polyolefins and polymers of the vinyl series in the viscofluid state have similar rheological characteristics, and on this basis, general rheological characteristics of polymers in the fluid state are given. Orig. art. has: 5 figures and 1 table.

ASSOCIATION: Institut neftekhimicheskogo sinteza AN SSSR im. A. V. Topchiyeva (Institute of Petrochemical Synthesis, AN SSSR)

SUBMITTED: 08Jun64 ENCL: 00 SUB CODE: MT, GC

NO REF SOV: 002 OTHER: 008

Card 2/2 CC

BELKIN, K. I.

"For the further successes of the Soviet biology of Michurin." (p. 625) by K. I. Belkin (Moscow)
SO: Progress of Contemporary Biology Vol. 26, No. 2 (5) Sept.-Oct. 1948

L 09301-67 EWP(k)/EWT(m)/EWP(t)/ETI IJP(c) JW/JD/HW/GD

ACC NR: AT6026913 (A) SOURCE CODE: UR/0000/66/000/000/0082/0085

AUTHOR: Golovin, S. A.; Belkin, K. N.; Drapkin, B. M.

ORG: None

TITLE: Internal friction in austenitic steels

SOURCE: AN SSSR. Institut metallurgii. Vnutrenneye treniye v metallakh i splavakh (Internal friction in metals and alloys). Moscow, Izd-vo Nauka, 1966, 82-85

TOPIC TAGS: internal friction, austenite steel, low frequency, carburization, plastic deformation, temperature dependence/Kh18N9 steel

ABSTRACT: Internal friction (Q^{-1}) as a function of temperature was studied for certain austenitic steels (see table) with low-frequency (~1 cycle) measurements being made using wire specimens 160 mm long and 0.8 mm in diameter and an RKF MIS vacuum torsion pendulum. Samples 200 mm long and 6-8 mm in diameter were investigated at 750-850 cycles. Annealing and heating was done in a vacuum of 10^{-3} torr; carburization was carried out in benzene vapors at 1,000°C for 1.5 hours.

Mark steel	Chemical composition, weight in %						
	C	Cr	Ni	Mn	Si	Al	S and P
Kh18N9	0.12	17.44	8.75	1.46	0.46		~0.01
45G17Yu3	0.45	0.24	-	17.45	0.18	2.76	~0.01

Card 1/2

L 09301-67

ACC NR: AT6026913

The formation of an internal friction maximum at 300°C in plastically deformed austenitic steels of the marks indicated can be associated with the migration of atoms of carbon in the austenite, and with the reaction of the latter with dislocations in the solid solution under the action of a variable-sign stress field. The author's opinion is that the low-temperature maximum is associated with migration of carbon in solid solution into the stress field, and the high-temperature one is linked with the reaction of interstitial atoms with dislocations at periodic vibrations of the system. For Kh18N9 steel relaxation in the region of the high-temperature branch of Q^{-1} (375-400°C) is caused by migration of interstitial atoms in the austenite into positions of the carbide-forming elements. The low temperature portion of the maximum relates to a relaxation process associated with the influence of plastic deformation. Orig. art. has: 2 formulas, 1 table, and 5 figures.

SUB CODE: 11 / SUBM DATE: 02 Apr 66/ ORIG REF: 005/ OTH REF: 001

Card 2/2 mls

L 14996-66 EWT(m)/EWP(w)/EWA(d)/T/EWP(t)/EWP(k)/EWP(z)/EWP(b) IJP(c)
ACC NR: AP5028565 (N) MJW/JD/EW SOURCE CODE: UR/0126/65/020/005/0763/0769

AUTHOR: Golovin, S. A.; Belkin, K. N.

ORG: Tula Polytechnic Institute (Tul'skiy politekhnicheskiy institut)

TITLE: Internal friction resulting from the plastic deformation of austenitic steels

SOURCE: Fizika metallov i metallovedeniye, v. 20, no. 5, 1965, 763-769

TOPIC TAGS: austenite steel, internal friction, temperature dependence, plastic deformation, relaxation process, metal physics, activation energy

ABSTRACT: Relaxation processes were studied in 1Kh18N9 and 1Kh18N10T Cr-Ni stainless steels. The temperature dependence of internal friction was obtained for plastically deformed 1Kh18N9 and for the 1Kh18N10T titanium bearing. Wire samples were used in a vacuum torsional pendulum at 1 cycle/sec at an amplitude of less than 10^{-6}. Annealing of the quenched samples was done in vacuo for 8-10 min, while plastic deformation was imparted by wire drawing (15 to 82%); 5% deformation was obtained by tension alone. The chemical compositions of the steels are listed below:

Card 1/3 UDC: 669.15 : 539.67

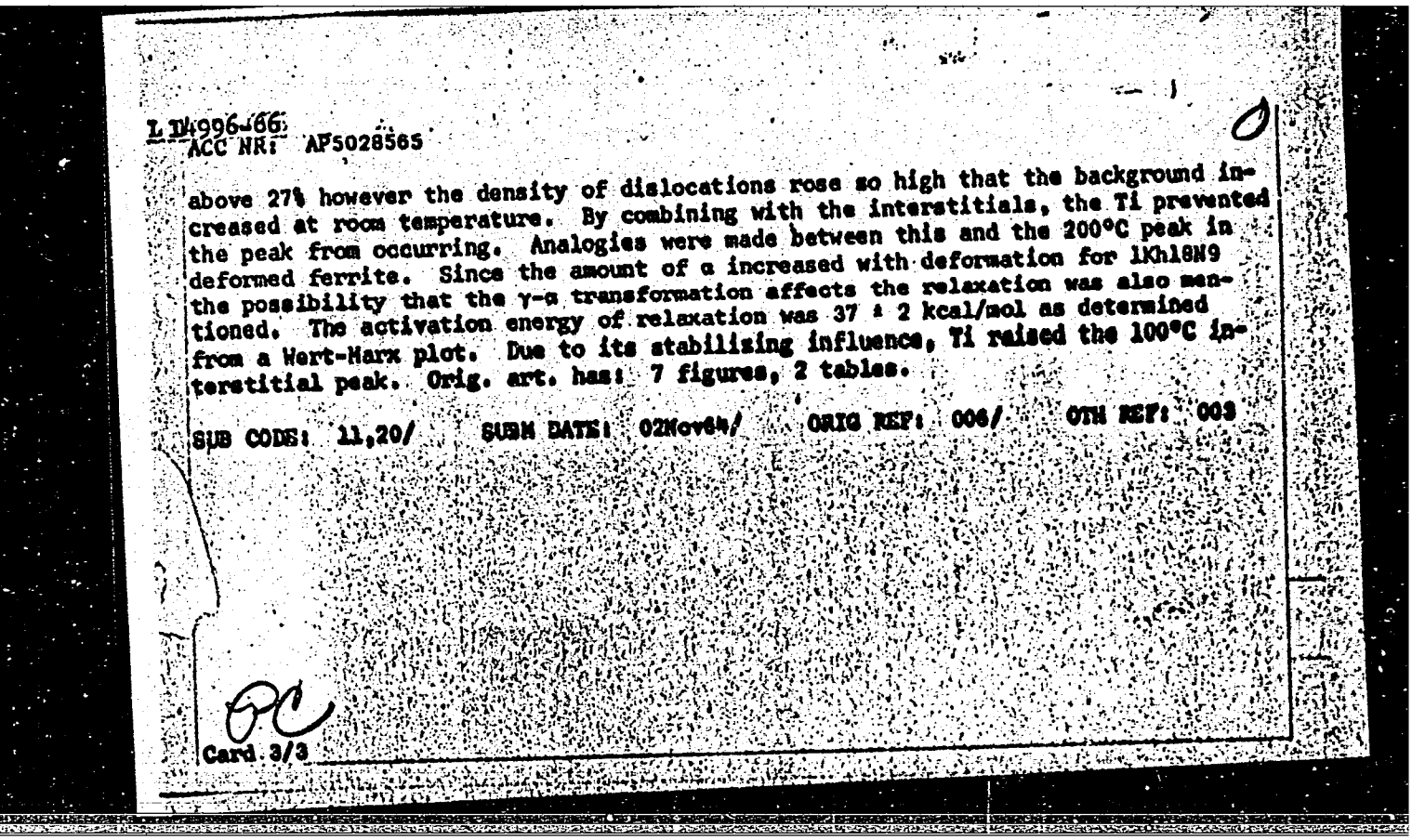
L 14996-66

ACC NR: AP5028565

Grade of steel	Chemical composition, wt %					
	C	Cr	Ni	Ti	Mn	Si
1X18H9	0.12	17.44	8.75	—	1.46	0.46
1X18H10T	0.10	18.9	10.8	0.51	1.8	0.79

Data are given for the temperature dependence of internal friction for specimens quenched from 925°, 1075° and 1150°C. After annealing (200° to 400°C), 1Kh18N9 steel showed a sharp decrease in background for quenching from 1075°C and 27% deformation. The anomolous damping at 80-100°C was also reduced in intensity. A phasometer was used to measure the amount of α-phase in 1Kh18N9 after deformation and annealing; the amount increased with deformation but annealing did not influence the quantity of α-phase in the steel. The occurrence of the 320°C peak was attributed to the presence of carbon and nitrogen. The effect of plastic deformation was to introduce dislocations which interacted with the interstitial atoms C and N;

Card 2/3



L 14996-66
ACC NR: AP5028565

above 27% however the density of dislocations rose so high that the background increased at room temperature. By combining with the interstitials, the Ti prevented the peak from occurring. Analogies were made between this and the 200°C peak in deformed ferrite. Since the amount of α increased with deformation for 1Kh18N9 the possibility that the γ-α transformation affects the relaxation was also mentioned. The activation energy of relaxation was 37 ± 2 kcal/mol as determined from a Wert-Marx plot. Due to its stabilizing influence, Ti raised the 100°C interstitial peak. Orig. art. has: 7 figures, 2 tables.

SUB CODE: 11,20/ SUBM DATE: 02Nov64/ ORIG REF: 006/ OTH REF: 003

Card 3/3

BELKIN, L., inzhener.

Methods of introducing vibration grinding in the building materials industry. Stroi.mat., Izdel.i konstr. 2 no.1:11-15 Ja '56. (MLRA 9:5)

1. Direktor instituta VNIITISM.
(Milling machinery)

KRASIL'SHCHIK, B.Ya.; VERBLOVSKIY, A.M.; Prinimali uchastiye: BELKIN, L.A.; DMITRIYEV, L.I.; STOLYAROV, I.M.

Automatization of feeding pulverized coal in slag treatment by the fuming process. TSvet. met. 33 no.6:31-36 Je '60. (MIRA 14:4)

(Zinc—Metallurgy) (Automatic control)

BARLASOV, B.Z.; BELKIN, L.A.; PIN, L.M.

Calculating the tuning parameters of the system for the automatic control of alcohol evaporation. Khim. prom. 41 no.5:366-368 My '65. (MIRA 18:6)

BELKIN, L.I.; GORELOV, L.R.; GORYACHIY, Ya.V.; ZILOV, A.L.; NEMTSOV, Yu.M.; TAPINSKIY, V.N.; YUTT, Ye.M.; ANDRONOV, A.F., inzh., red.

[Automobile "Moskvich" 403; design and maintenance] Avtomobil' "Moskvich" modeli 403; konstruktsiia i tekhnicheskoe obsluzhivanie. Moskva, Mashinostroenie, 1965. 402 p. (MIRA 18:8)

1. Glavnyy konstruktor Moskovskogo zavoda malolitrazhnykh avtomobiley (for Andronov).

BELKIN, L.I.

Immediate problems of automobile body design. Avt. i trakt. prom. no.2:3-5 F '58. (MIRA 10:3)

Moscow Plant of Automobiles im. Lenin Komsomol

1. Moskovskiy zavod malolitrazhnykh avtomobiley.
(Automobiles--Bodies)

SOV/113-59-4-4/19

AUTHOR: Belkin, L.I.

TITLE: Standards for Preparing Technological Drawings

PERIODICAL: Avtomobil'naya promyshlennost', 1959, Nr 4, pp 6-8 (USSR)

ABSTRACT: The introduction of state standards in the automobile industry, confirmed in 1950, did not result in an improvement in a number of cases. The projects for new standards for technological drawings, disseminated according to suggestions of industrial installations, do not eliminate the deficiencies of the effective GOST's. The author agrees with the critique published by S.G. Zislin from the Gor'kovskiy avtozavod (Gor'kiy Automobile Plant) concerning the active GOST's and the projects for their revision. The author points out that the standardization of technological drawings is not possible for all industrial installations. The technological drawings must be produced according to the manufacturing requirements of the individual installations. As long as the production methods are not standardized, it will be impossible to standardize technological drawings. The authors of the new GOST project

Card 1/2

Standards for Preparing Technological Drawings.

for technological drawing standardization are not familiar with all branches of machine building, but attempt the introduction of standards for all installations. At least in the automobile industry, these standards are by no means justified and lead to a number of unnecessary complications. The author cites several examples and analyzes deficiencies of GOST 5292. This GOST prescribes an obligatory set of technical documentation for each product, which, in the case of the automobile industry, is never used. The author further recommends using only a few rules for changing drawings which should be included in the project for the new GOST. The subjects of a state standard for technological drawings should consist of only those rules and requirements which may be easily used in all branches of the Soviet industry.

ASSOCIATION: Moskovskiy zavod malolitrazhnykh avtomobiley (Moscow Plant of Automobiles with Low Engine Displacement).

BELKIN, Leonid Isaakovich; GORYACHIY, Yakov Vladimirovich; NOVOSELOV, Igor' Vasil'yevich; YUTT, Yevgeniy Markovich; ANDRONOV, A.F., inzh., red.; VASIL'YEVA, I.A., red. izd-va; UVAROVA, A.F., tekhn. red.

[The "Moskvich-407" automobile; design and maintenance] Avtomobil' "Moskvich" modeli 407; konstruktsiia i tekhnicheskoe obsluzhivanie. Pod red. A.F.Andronova. Moskva, Gos.nauchno-tekhn. izd-vo mashinostroit.lit-ry, 1961. 398 p. (MIRA 14:6)

1. Glavnyy konstruktor Moskovskogo zavoda malolitrazhnykh avtomobiley (for Andronov)

(Automobiles)

BELKIN, L.I.; GORELOV, L.R.; GORYACHIY, Ya.V.; ZILOV, A.L.; NEMTSOV, Yu.M.; NOVOSELOV, I.V.; YUTT, Ye M.

["Moskvich-407" automobile; its design and maintenance]Avtomobil' "Moskvich-407"; konstruktsiia i tekhnicheskoe obsluzhivanie. [By] L.I.Belkin i dr. Izd.2., perer. Moskva, Mashinostroenie, 1965. 14 p. (MIRA 18:3)

BELKIN, M.

Number of efficiency promoters is growing. Mias. ind. SSSR 28 no.6: 7-8 '57. (MIRA 11:1)

1. Sovnarkhoz Kirgizskoy SSR.
(Kirghizistan--Meat industry)

BEIKIN, M.

On uniform technically founded production standards for the coal mining industry. Sots.trud 5 no.8:86-91 Ag '60. (MIRA 13:11)
(Soviet Central Asia--Coal mines and mining--Production standards)

BELKIN, M.

Discussing the White Russian experiment. Sots. trud 8 no.7: 100-105 Jl '63. (MIRA 16:10)

1. Nachal'nik Tashkentskoy normativno-issledovatel'skoy stantsii Gornodobyvayushchey promyshlennosti.

L 39687-66 EWT(1) GW/GD-2
ACC NR: AP6009541 (A,N) SOURCE CODE: UR/0413/66/000/005/0075/0076

AUTHOR: Lukaychenko, P. I.; Demchenko, V. F.; Belkin, M. A.

ORG: none

TITLE: A well gravimeter. Class 42, No. 179486

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 5, 1966, 75-76

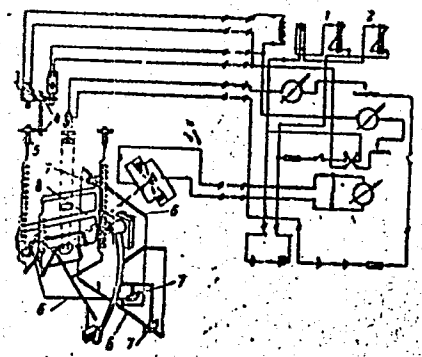
TOPIC TAGS: gravimeter, earth science instrument, electronic measurement

ABSTRACT: This Author's Certificate introduces a well gravimeter which contains a quartz elastic sensing system, a temperature compensator, an optical system and a measuring device. The accuracy of the instrument is improved and remote measurements are facilitated by electromagnetic counters in the measuring device which are connected through a sign-sensitive relay, collector and speed reducer to the micrometer screw of the measuring system. The temperature compensator is made in the form of series-connected quartz frames with levers whose axes of rotation are rigidly connected to the principal frame of the sensitive system.

UDC: 550.831

Card 1/2

L 39687-66
ACC NR: AP6009541



1 and 2--electromagnetic counters; 3--collector; 4--speed reducer; 5--micrometer screw; 6--quartz rollers; 7--axes of rotation for the levers; 8--main frame

SUB CODE: 08/ SUBM DATE: 01Mar63/ ORIG REF: 000/ OTH REF: 000

Card 2/2

HELKIN, M.B.

Experience with dispensary services for the rural population. Klin. med. 32 no.8:64-66 Ag '54. (MLRA 7:10)

1. Iz Kazanskoy rayonnoy bol'nitsy Nikolayevskoy oblasti USSR.
(OUTPATIENT SERVICES,
in Russia, dispensary serv. for rural population)
(RURAL CONDITIONS,
in Russia, dispensary serv. for rural population)

BELKIN, M. B.

Medical services for the rural population during the season of intensified field work. Sov. med. 20 no.4:58-61 Ap '56. (MLRA 9:8)

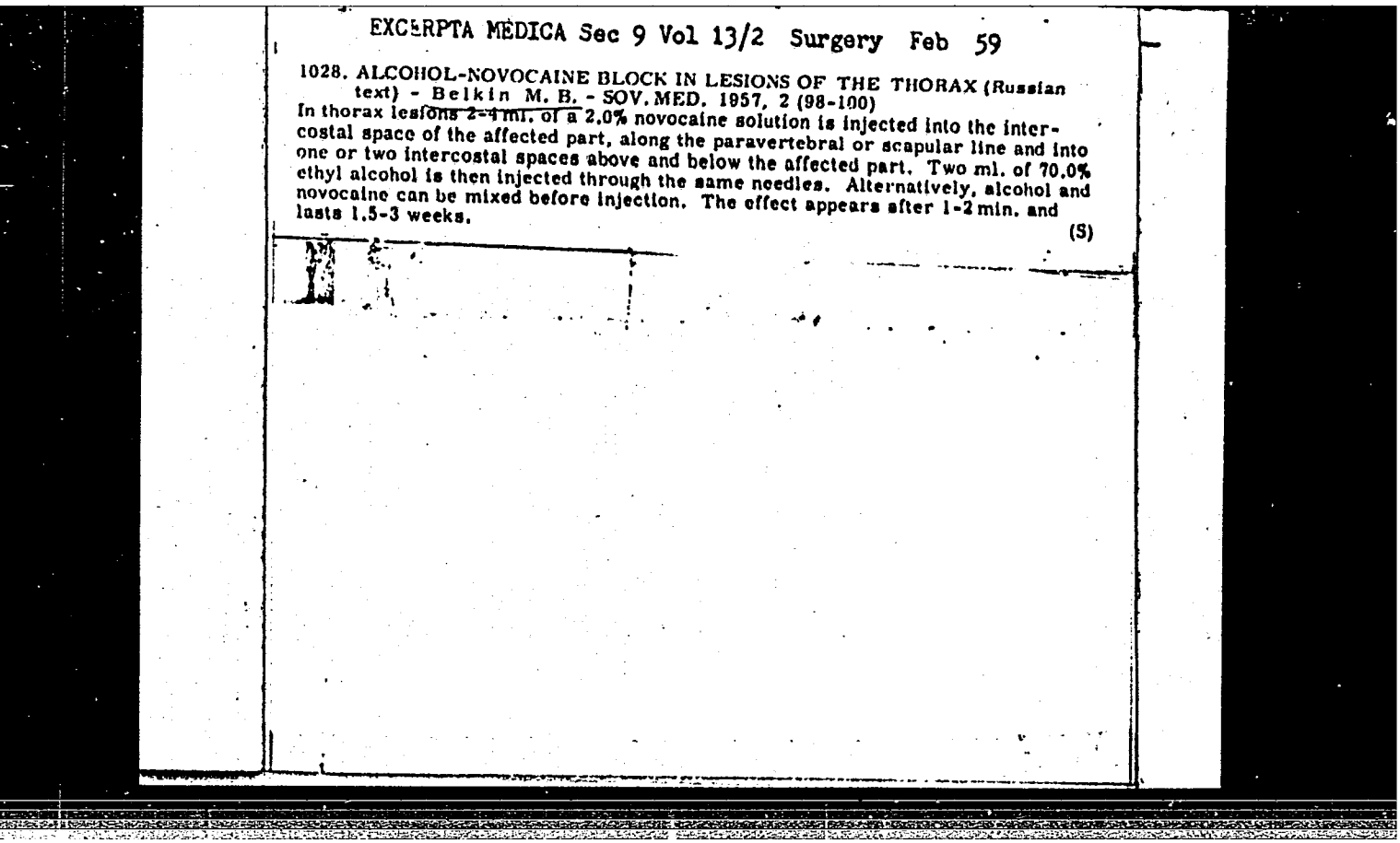
1. Glavnyy vrach Kazankovskoy rayonnoy bol'nitsy Nikolayevskoy oblasti.

(RURAL CONDITIONS,
med. serv. in Russia (Rus))
(PUBLIC HEALTH,
rural med. serv. (Rus))

BELKIN, M.B.

Treating rib fractures and chest injuries by an alcohol-novocaine block. Nov.khir.arkh. no.2:75 Mr-Ap '57. (MLRA 10:8)

1. Kazankovskaya rayonnaya bol'nitsa
(CHEST--WOUNDS AND INJURIES) (NOVOCAINE)
(ALCOHOL--THERAPEUTIC USE)



EXCERPTA MEDICA Sec 9 Vol 13/2 Surgery Feb 59

1028. ALCOHOL-NOVOCAINE BLOCK IN LESIONS OF THE THORAX (Russian text) - Belkin M. B. - SOV. MED. 1957, 2 (98-100)

In thorax lesions 2-4 ml. of a 2.0% novocaine solution is injected into the intercostal space of the affected part, along the paravertebral or scapular line and into one or two intercostal spaces above and below the affected part. Two ml. of 70.0% ethyl alcohol is then injected through the same needles. Alternatively, alcohol and novocaine can be mixed before injection. The effect appears after 1-2 min. and lasts 1.5-3 weeks.

(S)

BELKIN, M.B.

Diagnosis of perforating typhoid peritonitis. Sov.med. 25 no.12: 117-119 D '61. (MIRA 15:2)

1. Iz khirurgicheskogo otdeleniya (zav. - M.B.Belkin) i 1-go infektsionnogo otdeleniya (zav. - V.B.Birinberg) Nikolayevskoy gorodskoy bol'nitsy No.1 (glavnyy vrach K.F.Timoshevskaya).
(TYPHOID FEVER) (PERITONITIS)

BELKIN, M.B.; SNIGIR', D.G.

Noble's operation in adhesive intestinal obstruction. Klin.khir. no.7:72-73 Jl '62. (MIRA 15:9)

1. Khirurgicheskoye otdeleniye (zav. - M.B.Belkin) Nikolayevskoy gorodskoy bol'nitsy No.1.
(INTESTINES—OBSTRUCTIONS)

BELKIN, M.D. AND SHTYKHOV, G.S.

Brushes for Electrical Machinery, Their Manufacture and Uses (Shchetki dlya elektricheskikh mashin, ikh proizvodstvo i primeneniye), Gosenergoizdat, 1952, 158 pages.

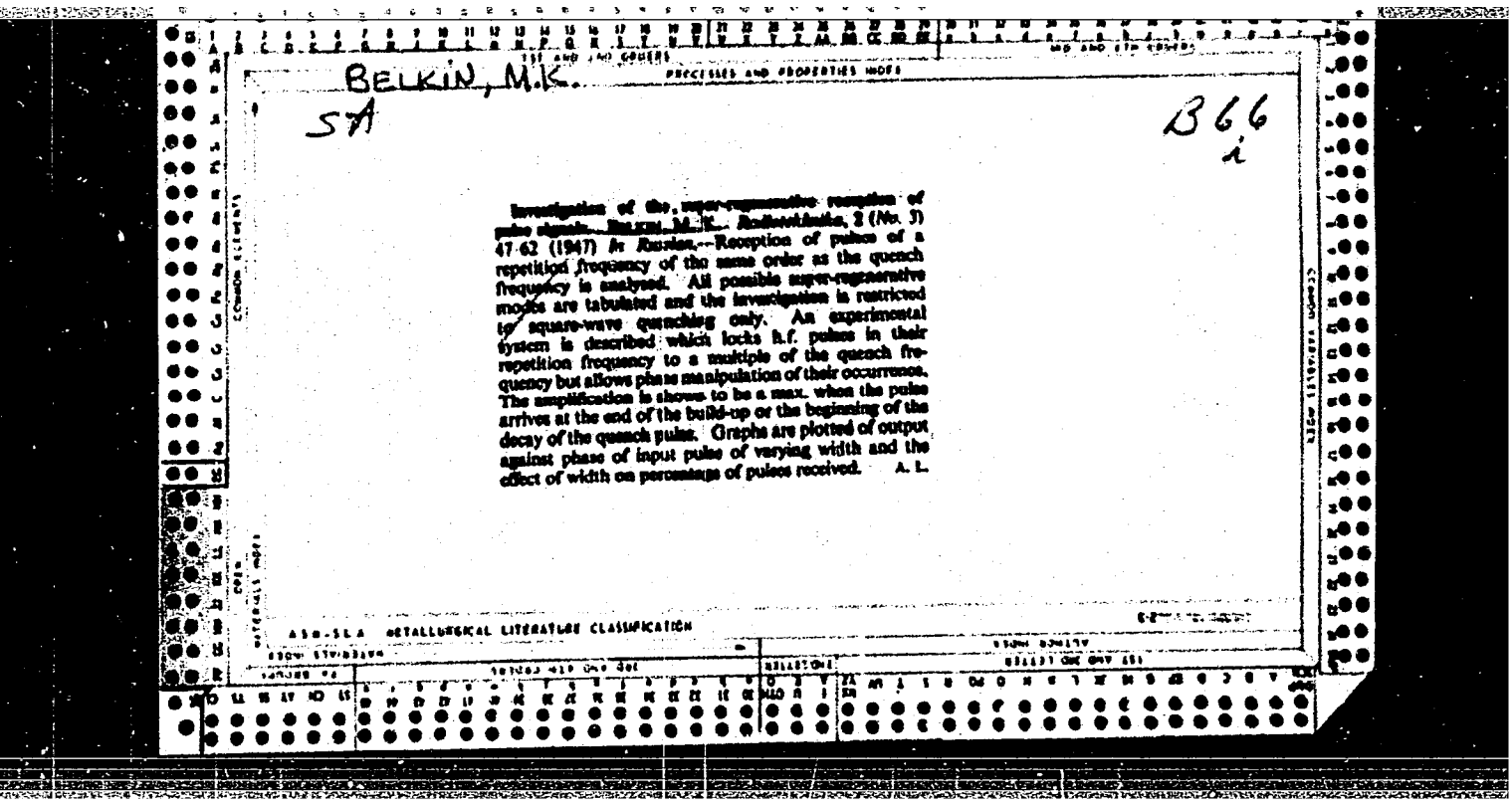
This book contains a classification of electric brushes according to composition and technical characteristics. It discusses the properties of brushes as the determining factor in their application; the conditions which determine their operation; their role in the commutation process; and physicochemical properties of brushes. The book briefly describes the manufacture of brushes and discusses selection of brushes. In addition, the book contains rather detailed data on replacement of foreign-made brushes with domestic brushes. Also, the book describes causes of sparking and methods of eliminating it.

This book is intended for engineers, technicians and qualified personnel engaged in adjusting and operating electric machines.

So: W-30262

LIVSHITS, Pavel Sergeyevich; BELKIN, M.D., red.; BORUNOV, N.I., tekhn. red.

[Brushes for electric machinery; technology, testing, characteristics, design and use] Shchetki dlia elektricheskikh mashin; tekhnologiia, ispytaniia, kharakteristiki, konstruirovanie, ekspluatatsiia. Moskva, Gos. energ. izd-vo, 1961. 214 p. (MIRA 14:8)
(Brushes, Electric)



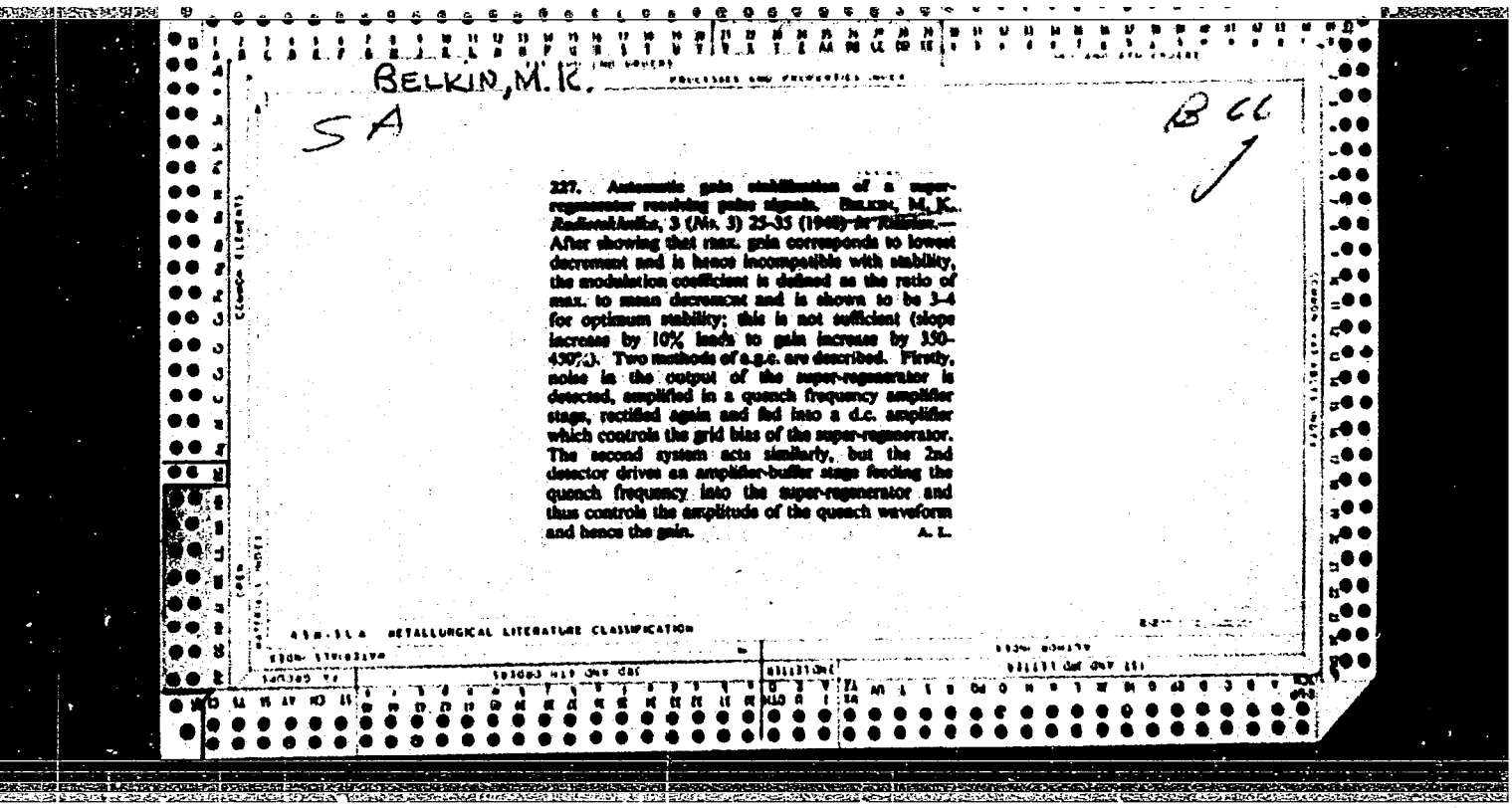
BELKIN, M.K.

SA

B66
2

Investigation of the super-regenerative reception of pulse signals. Belkin, M. K. *Radiotekhnika*, 2 (No. 3) 47-62 (1947) *In Russian.*--Reception of pulses of a repetition frequency of the same order as the quench frequency is analysed. All possible super-regenerative modes are tabulated and the investigation is restricted to square-wave quenching only. An experimental system is described which locks h.f. pulses in their repetition frequency to a multiple of the quench frequency but allows phase manipulation of their occurrence. The amplification is shown to be a max. when the pulse arrives at the end of the build-up or the beginning of the decay of the quench pulse. Graphs are plotted of output against phase of input pulse of varying width and the effect of width on percentage of pulses received. A. L.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



BELKIN, M. K.

SA

B CC

227. Automatic gain stabilization of a super-regenerator receiving pulse signals. BELKIN, M. K. *Radiotekhnika*, 3 (No. 3) 25-35 (1948).—In Russian.—After showing that max. gain corresponds to lowest decrement and is hence incompatible with stability, the modulation coefficient is defined as the ratio of max. to mean decrement and is shown to be 3-4 for optimum stability; this is not sufficient (slope increase by 10% leads to gain increase by 350-430%). Two methods of a.g.c. are described. Firstly, noise in the output of the super-regenerator is detected, amplified in a quench frequency amplifier stage, rectified again and fed into a d.c. amplifier which controls the grid bias of the super-regenerator. The second system acts similarly, but the 2nd detector drives an amplifier-buffer stage feeding the quench frequency into the super-regenerator and thus controls the amplitude of the quench waveform and hence the gain. A. L.

BELKIN, M. K.

K teorii otrazhatel'nogo klistrona. (Radiotekhnika, 1951, v. 6, no. 5, p. 27-32)

Title tr.: Theory of the reflex klystron.

NCF

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

BELKIN, M.K., kand. tekhn. nauk.

Designing input circuits of radio shortwave receivers. Radiotekhnika 8 no.1:55-63 Ja-F '53. (MIRA 11:6)
(Radio, Shortwave--Receivers and reception)