TSYKIN, G. S., Docent

"Recent Problems of the Theory and Design of Low-Frequency Transformers."
Sub 28 Jun 51, Moscow Electrical Engineering Inst of Communications.

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55.

TSYKIN, G.S.

The Committee on Stalin Prizes (of the Council of Ministers USSR) in the fields of science and inventions announces that the following scientific works, popular scientific books, and textbooks have been submitted for competition for Stalin Prizes for the years 1952 and 1953. (Sovetskaya Kultura, Moscow, No. 22-40, 20 Feb - 3 Apr 1954)

Name	Title of Work	Nominated by
Tsykin, G.S.	"Low Frequency Transformers"	Ministry of Communic tions

SO: W-30604, 7 July 1954

TSYKIN, Georgiy Sergeyevich; CHISTYAKOV,N.I., redaktor; GALOYAN,M.A., SOKOLOVA,M.Ya., tekhnicheskiy redaktor

[Computation of the degrees of broad-banded and impulse amplification with simple high-frequency correction] Raschet stupenei shirokopolosnogo i impul'snogo usileniia s prostoi vysokochastotnoi korrektsiei. Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio, 1955. 79 p. (MLRA 9:2)
(Amplifiers, Electron-tube)

PHASE I BOOK EXPLOITATION 930

Tsykin, Georgiy Sergeyevich

Transformatory nizkoy chastoty; teoriya, raschet i konstruirovaniye (Low-frequency transformers; Theory, Design and Construction) Moscow, Svyaz'izdat, 1955. 429 p. 10,000 copies printed.

Resp. Ed.: Furduyev,V.V.; Ed.: Galoyan,M.A.; Tech.Ed.: Sokolova,R.Ya.

PURPOSE: This monograph is addressed to those desiring detailed and up-to-date information on the theory and practical design of low-frequency transformers.

COVERAGE: Though the Soviet radio and electrical equipment industry has been successful in producing new kinds of magnetic materials and magnet wire required in the manufacture of the latest low-frequency transformers, there has been no data or information in the literature giving the characteristics of these materials. The book presents the results of studies made of such characteristics, i.e., initial permeability with and without magnetization, curves of

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Low-frequency transformers (Cont.) 930

optimum nonmagnetic gaps for transformer steels and permalloys, curves of harmonic factors, and Q-factor curves for various magnetic materials. The mass production and the ever-growing use of electronic equipment require that in the design of transformers the structural and economic requirements of the equipment for which such transformers are used be taken into consideration. With this end in view, a discussion of transformers of the least weight and cost, and an analysis of optimum dimensional relationships of transformers have been included in the present work. The author thanks Professors V.V.Furduyev and G.A.Levin for their valuable suggestions. There are 30 references, of which 26 are Soviet, and 4 English.

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AVAILABLE: Library of Congress (TK7872.T7T8 1955)

JP/whl
1-9-59

Card 12/12

TSYKIN, G. [S.]

USSR/ Electronics - Radio receivers

Card 1/1 Pub. 89 - 17/24

Authors : Tsykin, G., Prof. Dr. of Tech. Sc.

Title : Radio receiver with semi-conductive triodes

Periodical : Radio 5, 42 - 44, May 1955

Abstract : The characteristics of a new economical radio receiver, which uses semi-conductive triodes instead of the conventional electron tube, are described. The receiver is capable of loudspeaking reception of local radio station transmission and requires only 0.03 - 0.05 W as a source of power. The sensitivity of the receiver can be increased by adding one HF amplification stage. It is stated that a well tuned receiver with two HF amplification stages assembled on semi-conductive triodes and with two LF amplification stages assembled on flat triodes plus a small frame or magnetic antenna built-in in the receiver offers excellent reception of all local radio stations. Diagrams; drawings.

Institution : .....

Submitted : .....

FD-2653

USSR/Electronics-Semiconductor Devices

TSYKIN, G. S.

Card 1/1 Pub. 90-3/11

Author : Tsykin, G. S., Active Member, VNORiE

Title : Selection of Conditions, Calculation of load, and Determination of nonlinear distortions in amplification stages using junction transistors

Periodical : Radiotekhnika, 10, 28-36, Aug 1955

Abstract : The author presents a procedure for selecting operating conditions and basic formulas for calculating low-frequency amplification stages using transistor triodes which he states are accurate enough for practical purposes and do not require the use of the complex and cumbersome equations of four-terminal network theory. He further states that in the majority of cases the generally accepted proposition that the load must be matched to the transistor's output impedance does not hold true.

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

Submitted : June 1, 1955

FD-2291

TSYKIN, G.S

USSR/Electronics

Card 1/1 Pub 90-4/12

Author : Tsykin, G. S., Active Member VNORiE

Title : Calculation of a Cathode Follower

Periodical : Radiotekhnika 10, 37-44, Jan 1955

Abstract : Article undertakes comparison of voltage gain for a cathode follower and an amplification stage with plate load. It discusses frequency-phase characteristics in regions of both higher and lower operating frequencies and also the transient characteristic of a cathode follower. Formulas are given for calculating the fundamental circuit elements. Graphs. Table. 6 references, all USSR.

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

Submitted : July 5, 1954

TSYKIN,G., professor, doktor tekhnicheskikh nauk

Selecting cascade regimes for low-frequency amplifiers. Radio no.10:42-43 O'55. (MLRA 9:1)

(Semiconductors)

TSYKIN,G., professor, doktor tekhnicheskikh nauk; TSYKINA,A., inzhener

Pocket radio receiver. Radio no.11:40-41 N'55. (MLRA 9:1)
(Radio--Receivers and reception)

USSR / Radiophysics I

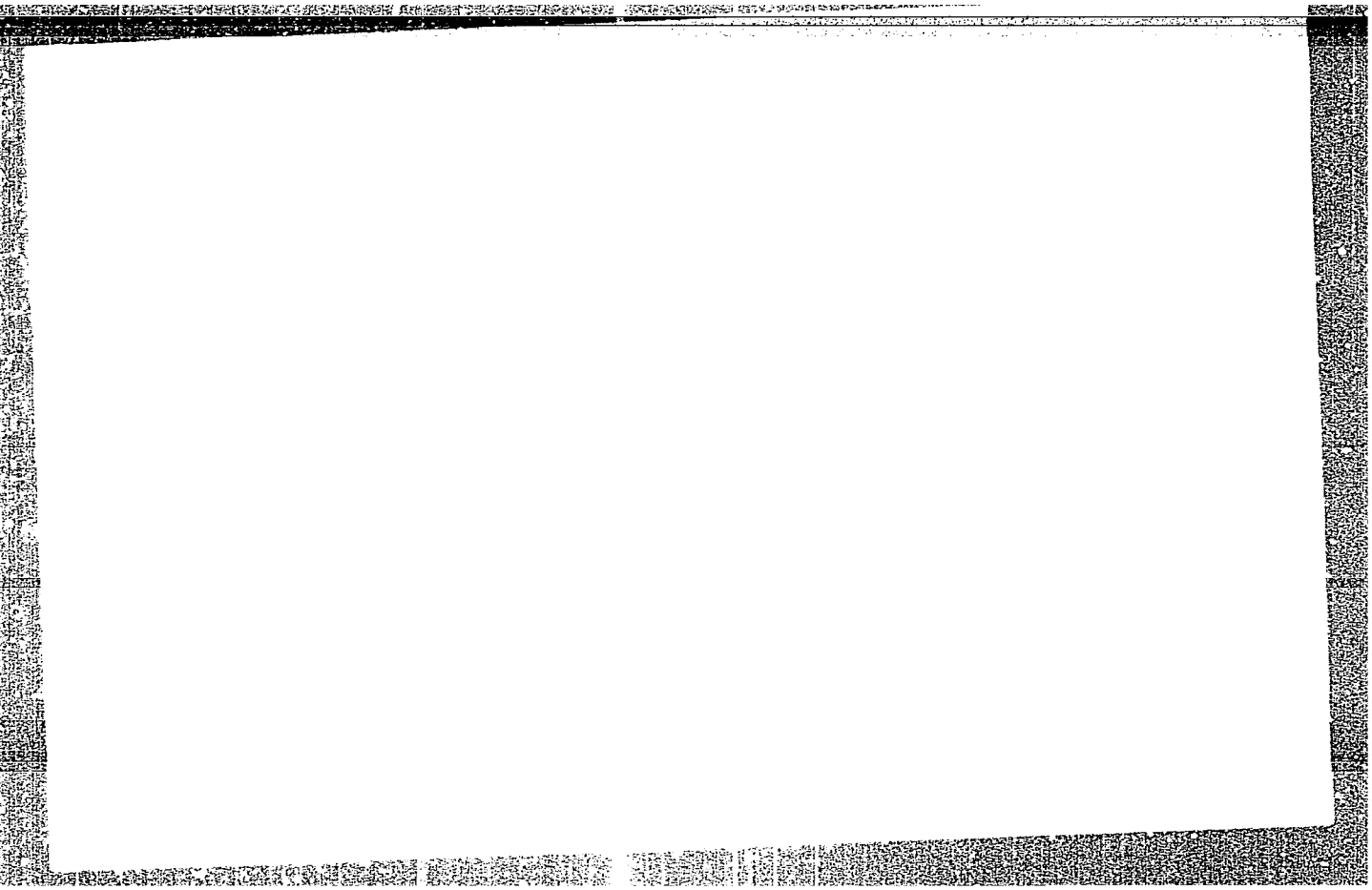
Abs Jour : Ref Zhur - Fizika, No 4, 1957, No 10052

Author : Tsykin, G.S.
Inst : Not given
Title : Design of Transistor Power Amplifier Stages.

Orig Pub : Elektrosvyaz', 1956, No 9, 26-45

Abstract : Discussion of the principles of the designs of power junction transistor amplifier stages in class A and class B operation for various transistor connection circuits. For both classes of operation, a theoretical analysis is made, design formulas are given, and the design procedure is described, with examples of practical calculation being given.

Card : 1/1



APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001757310018-8"

GERSHZON, Yevgeniy Vladimirovich; NIKOLAYEVSKIY, Iosif Fedorovich; TSYKIN, G.S., redaktor; LARIONOV, G.Ye., tekhnicheskiy redaktor

[Transistors in circuits of radiobroadcasting and television apparatus] Poluprovodnikovye triody v skhemakh radioveshchatel'noi i televizionnoi apparatury. Moskva, Gos.energ.izd-vo, 1957. 94 p. (Massovaia radiobiblioteka, no.266) (MLRA 10:9)
(Transistors) (Radio--Apparatus and supplies)
(Television--Equipment and supplies)

Tsykin, G.S.

AUTHOR: Tsykin, G. S., Regular Member of the Society 108-12-7/10

TITLE: Semiconductor-Direct Current Transformer (Poluprovodnikovyy preobrazovatel' postoyannogo toka).

PERIODICAL: Radiotekhnika, 1957, Vol. 12, Nr 12, pp. 56-62 (USSR)

ABSTRACT: The methods for the transformation of the direct current of one voltage into the direct current of another voltage, which can be used for the feeding of an electronic apparatus, are investigated. A semiconductor transformer is suggested which is characterized by a control generator with rectangular output voltage. This control generator controls a powerful amplifier with semiconductor triodes, which work at remote control speed (rezhim klyuchevaniya). The rectangular voltage at the amplifier output is rectified by a semiconductor rectifier and reaches the load by way of a smoothing filter. The control generator and the amplifier are fed by the source the voltage of which is to be transformed. The separation of the functions of the production of oscillations, of those of their amplification, and those of rectification makes it possible to remove the drawbacks to be found with other schemes and to warrant an optimum operation of the transformer.

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Semiconductor-Direct Current Transformer

108-12-7/10

The power taken from the triodes increases essentially and its degree of efficiency attains 90-95 %. The basic properties of the transformer scheme with a control generator and the calculation of such a scheme are described. The transformers produced in accordance with this scheme have good stability and agree with respect to characteristics with those of calculation.
There are 8 figures.

SUBMITTED: April 15, 1957

AVAILABLE: Library of Congress

1. Transformers-Semiconductors 2. Electric current-Transfer
3. Triodes

Card 2/2

TSYKIN, G. S.

FILIPOV, A.G.

9(4) 24(6) P 4 PHASE I BOOK EXPLOITATION SOV/1765

Vsesoyuznoye nauchno-tekhnicheskoye obshchestvo radiotekhniki i elektrosvyazi

Poluprovodnikovaya elektronika (Semiconductor Electronics) Moscow, Gosenergoizdat, 1959. 222 p. 13,950 copies printed.

Ed.: V.I. Shamshur; Tech. Ed.: K.P. Voronin.

PURPOSE: The book is intended for engineering and technical personnel working with semiconductor devices.

COVERAGE: The book is a collection of lectures delivered at the All-Union Seminar on Semiconductor Electronics in March 1957. The seminar was organized by the Scientific and Technical Society of Radio Engineering and Electrical Communications imeni A.S. Popov. The lectures have attempted to systematize the basic information on the operation of semiconductor devices. The articles describe the operation of semiconductor diodes and transistors and discuss their application in various low-frequency, high-frequency and pulse circuits. No personalities are mentioned. References appear at the end of each article.

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208

G.S. Tsykin. Transistor Inverter of D-C Voltages

The author discusses the operation and characteristics of inverter circuits using transistors. Special attention is given to the operation and design of inverter circuits with a signal generator. There are no references.

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Card 6/7

Kononov, E.N. Voltage Stabilizers Using Semiconductor Devices.

The author discusses voltage stabilizing circuits using silicon crystal diodes and transistors. He also explains equations for series and feedback stabilization compensation. There are 4 references of which 1 is Soviet and 3 English.

AVAILABLE: Library of Congress

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5-26-59

Card 7/7

TSYKIN, Georgiy Sergeyevich; VOYSHVILLO, G.V., prof., retsenzent; VENGRENYUK, L.I., red.

[Electronic amplifiers] Elektronnye usiliteli. Izd.3., dop. Moskva, Sviaz', 1965. 510 p. (MIRA 18:8)

VOYSHVILLO, Georgiy Valerianovich; CHISTYAKOV, N.I., retsenzent; TSYKIN, G.S., otv. red.; TSEYTLIN, F.G., red.; ROMANOVA, S.F., tekhn. red.

[Electron-tube low frequency amplifiers] Usiliteli nizkoi chastoty na elektronnykh lampakh. Izd.2., dop. Moskva, Sviaz'izdat, 1963. 759 p. (MIRA 16:9)
(Amplifiers, Electron-tube)

TSYKIN, Georgiy Sergeyevich; VENGRENYUK, L.I., red.; GRISHINA, L.A., tekhn. red.

[Electronic amplifiers] Elektronnye usiliteli. Izd.2., dop. Moskva, Sviaz'izdat, 1963. 509 p. (MIRA 16:9)
(Amplifiers (Electronics))

TSYKIN, G.S.; TSZYAN ZHUN-FU [Chiang Jung-fu]

Design of networks for the stabilization of the operating points in transistor stages. Elektrosviaz' 16 no.4:11-20 Ap '62. (MIRA 15:4)

(Transistor circuits)

S/106/62/000/004/002/010
A055/A101

9,2520

AUTHORS: Tsykin, G.S.; Chiang Jung-fu

TITLE: Design of some systems stabilizing the operating point in transistorized stages

PERIODICAL: Elektrosvyaz', no. 4, 1962, 11 - 20

TEXT: This article deals with the theoretical calculation of the simplest systems stabilizing the transistor-stage operating point. No simplifying assumptions are made. Three systems using feedback are examined and the essential formulae are deduced. The authors recall first the general conditions that must be satisfied as regards the admissible variation of the transistor-stage output-circuit quiescent current (minimum and maximum admissible values of this current) and speak of the usual methods of calculation. [Abstracter's note: This general part of the article covers 4 pages.] They examine next the three following systems: 1) Collector stabilization with parallel negative feedback (Fig. 3). The authors briefly enumerate the cases in which this stabilizing system cannot be used. They show next, on a numerical example, that the use of this system is often quite possible at small values of the maximum initial collector current ($I_{col\ in\ max}$).

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Design of some systems stabilizing the ....

They deduce, for this case, formulae giving, respectively, R_1, $I_{col\ max}$ and $U_{col\ em\ min}$, and apply these formulae to their practical example. 2) Emitter stabilization with series negative current-feedback (Fig. 5). The authors deduce formulae giving R_1, $I_{col\ max}$ and $I_{em\ max}$, respectively. They mention the advantages and defects of the emitter stabilization. They apply then their formulae to a practical example and calculate R_{em}, $I'_{col\ in\ min}$(minimum initial collector current for zero collector-base voltage), $U_{b\ em\ max}$, R_1, $I'_{col\ in\ max}$, $U_{b\ em\ min}$ and $U_{col\ em\ min}$. 3) Combined stabilization, where the output stage contains a decoupling filter C_f, R_f (Fig. 6). The authors deduce here four formulae giving, respectively, R_1, $I_{col\ max}$, $I_{em\ max}$ and $U_{col\ em\ min}$. Experiments showed that all the above-mentioned formulae yield results in close agreement with the experimental ones, the discrepancies, not exceeding a few percent. There are 6 figures.

SUBMITTED: January 10, 1962

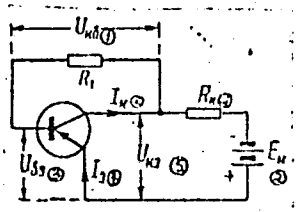

Figure 3: (1) col b; (2) col; (3) b em; (4) em; (5) col em.

Card 2/3

26210
S/106/60/000/003/002/003
A055/A133

9.2520

AUTHORS: Balanov, A.T.; Tsykin, G.S.

TITLE: Some problems concerning transistorized audio-frequency class B stages using power-supply rectifiers

PERIODICAL: Elektrosvyaz', no. 3, 1960, 26 - 33

TEXT: After enumerating the various causes of non-linear distortions in transistorized audio-frequency class B stages using power-supply rectifiers (and namely the distortion due to the power-source impedance Z_{source} when this impedance is commensurable with the amplifier load R_e), the authors discuss the adequate choice of the parameters of the smoothing filter ensuring an undistorted operation of the amplifier. Sound signals with time-varying level can be considered as a certain carrier modulated by a relatively slow varying function [Ref. 2: Yu.S. Bykov, Teoriya razborchivosti rechi i povysheniye effektivnosti radiotelefonnoy svyazi (Theory of speech intelligibility and increase of radio-telephone communication efficiency), Gosenergoizdat, 1959]. For simplicity, the authors assume that the level of the input signal at sound frequency ω varies cosinusoidally with the modulating frequency Ω, i.e.:

$$i_{inp}(t) = I_{inp\ mod}(1 + m \cos \Omega t) \sin \omega t, \qquad (3)$$

Some problems concerning transistorized ....

where m is the sound-frequency modulation factor. Taking into account the cutoff in class B amplifiers, the collector currents of the triodes can be expressed as:

$$i_{k1}(t) = I_{k\,mod}(1 + m\cos\Omega t)\left[\frac{1}{\pi} + \frac{1}{2}\sin\omega t - \frac{2}{\pi}\sum_{n=1}^{\infty}\frac{\cos 2n\omega t}{4n^2 - 1}\right], \quad (4)$$

$$i_{k2}(t) = I_{k\,mod}(1 + m\cos\Omega t)\left[\frac{1}{\pi} + \frac{1}{2}\sin(\omega t - \pi) - \frac{2}{\pi}\sum_{n=1}^{\infty}\frac{\cos 2n(\omega t - \pi)}{4n^2 - 1}\right], \quad (5)$$

where $I_{k\,mod} = kI_{inp\,mod}$, and k = constant is the current amplification factor. Expressions in brackets represent a development into Fourier series of half-sinusoidal pulses of frequency ω, where pulses $i_{k2}(t)$ lag by π behind pulses $i_{k1}(t)$. The equivalent circuit of the investigated transistorized stage is given. The collector voltage is the sum of the voltage of half the primary winding of the output transformer $u_T(t)$ (which does not contain components at the envelope frequency), and of the voltage drop across the power-source impedance due to current $i_f(t)$ (which contains the modulating frequency Ω). Since $\Omega \ll 2n\omega$, and the filter resonant frequency $\Omega_{res} \ll 2n\omega$, the voltage drop across Z_{source} corresponding to components at frequency $2n\omega$ can be neglected. On the other hand, tak-

Some problems concerning transistorized....

ing into account the statistical independence of ω and Ω, and the fact that $\Omega \ll \omega$, only the voltage amplitude on half the primary winding of the output transformer can be taken into consideration. The upper envelope of the collector voltage will then be:

$$u_k(t) = -\left[E_k - \frac{2}{\pi} I_{k\,mod}\, r_{rect} - \frac{2}{\pi} m\, I_{k\,mod}\, Z_{source} \cos(\Omega t + \varphi_{source}) - I_{k\,mod} R_e \cdot (1 + m \cos \Omega t)\right], \quad (8)$$

where Z_{source} and φ_{source} correspond to the impedance of the supply circuit. To avoid limitation of the signal, the minimum absolute magnitude of the collector voltage must not be below: $|E_{ko}(1 - \xi_{max})| \leq |u_{k\,min}|$, (9) at all envelope frequencies. [In formula (9), E_{ko} is the collector voltage in the chosen operating point and ξ_{max} is the maximum possible utilization factor of collector voltage determining critical operation.] Z_{source} becomes here purely active and equal to $\frac{L}{C\, r_{rect}}$, $\varphi_{source} = 0$, and $u_{k\,min}$ is determined by the left-hand part of the inequality:

$$-E_k + \frac{2}{\pi} I_{k\,mod}\, r_{rect} + \frac{2}{\pi} m\, I_{k\,mod} \frac{L}{C\, r_{rect}} + I_{k\,mod} R_e (1 + m) \leq -E_{ko}(1 - \xi_{max}). \quad (10)$$

Distortions due to the upper cutoff of collector current can occur also if the amplitude of the amplified signal is constant, this because of the presence of the rectifier impedance r_{rect}. Distortions will not arise if collector voltage

Some problem concerning transistorized....

E_{ko} is selected so as to satisfy the following condition: $E_{ko} = E_k - \frac{2}{\pi} I'_{k\,max} r_{rect}$, (11) where $I'_{k\,max}$ is the maximum admissible collector current amplitude, on the basis of which the load impedance is calculated according to:

$$R_e = \frac{\xi_{max} E_{ko}}{I'_{k\,max}} . \quad (2)$$

Substituting (2) and (11) in (10), and introducing the parameters $q = \frac{r_{rect}}{R_e}$ and $\delta = \frac{2 I_{k\,mod}}{I'_{k\,max}}$, the authors find: $\frac{L}{C} \leq \frac{q \pi R_e^2}{2m \delta} \left[\left(1 + \frac{2}{\pi} q\right)(2 - \delta) - \delta m\right] . \quad (12)$

Coefficient δ characterizes the under-utilization of the triodes as regards collector current, necessary in the examined case for ensuring undistorted operation of the stage. Since $\Omega_o = \frac{1}{\sqrt{LC}}$ can be easily determined by the required smoothing factor, it is possible to calculate, using the following relationships, the magnitude of the parameters of the filter: $L_{max} \leq \frac{R_e B}{\Omega_o}$, (13); $C_{min} \geq \frac{1}{\Omega_o R_e B}$ (13'), where $B = \sqrt{\frac{q}{\delta}\left[(\pi + q)(1 - \delta) + q\right]}$. Since the magnitude of C_{min} as given by (13') proves often extremely large, it is interesting to find out how much it can be reduced if a slight upper cutoff of collector current is tolerated. For this purpose, the authors assume that the ratio $\frac{L}{C}$, as calculated according to (12),

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must be increased h times, δ, q and Ω_o remaining unchanged. They find that, in that case, it is hardly possible to reduce considerably the magnitude in question. The new magnitude is $C'_{min} = \frac{C_{min}}{\sqrt{h}}$, and the numerical calculation of the maximum harmonic coefficient shows that this coefficient increases rapidly with h. In a practical case, the authors found that a 17% and 23% reduction of C_{min} brings about distortions of 5.6 and 12.2%, respectively. The fundamental formulae deduced in this article were checked experimentally by the authors on a transistorized stage with "P4-B" triodes on a common base, using either a rectifier or a d-c power supply. In both cases, the experimental results coincided, with a practically sufficient accuracy, with the calculated magnitudes. [Abstracter's note: Subscript mod (modulation) stands for the Russian мод; l (load) for н; f (filter) for ф; rect (rectifier) for в; source for ист; res (resonant) for р; max (maximum) for макс; min (minimum) for мин; outp (output) for вых; inp (input) for вх.] There are 8 figures and 5 Soviet-bloc references.

SUBMITTED: November 30, 1959

Card 5/5

TSYKIN, Georgiy Sergeyevich; VOYSHVILLO, G.V., red.; VORONIN, K.P., tekhn. red.

[Signal amplifiers] Usiliteli elektricheskikh signalov. Moskva, Gos. energ. izd-vo, 1961. 422 p. (Massovaia biblioteka. Uchebnaia seriia, no.414) (MIRA 14:9)
(Amplifiers, Electron tube) (Transistor amplifiers)

TSYKIN, Georgiy Sergeyevich; VOYSHVILLO, G.V., otv.red.; VENGRENYUK, L.I., red.; MARKOCH, K.G., tekhn.red.

[Electronic amplifiers] Elektronnye usiliteli. Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio, 1960. 486 p. (MIRA 14:3)

(Amplifiers (Electronics))

BALANOV, A.T., TSYKIN, G.S.

Some questions on the use of rectifiers as a source of power for low frequency transistor cascades in class B operation. Elektrosviaz' 14 no.3:26-33 Mr '60. (MIRA 13:6)

(Transistors) (Electric current rectifiers)

VOYSHVILLO, Georgiy Valerianovich; CHISTYAKOV, N.I., retsenzent; TSYKIN, G.S., otv.red.; KOKUSHKIN, A.A., red.; KARABILOVA, F.S., tekhn.red.

[Low frequency amplifiers using electron tubes] Usiliteli nizkoi chastoty na elektronnykh lampakh. Moskva, Gos.izd-vo lit-ry po voprosam sviazi i radio, 1959. 754 p. (MIRA 13:3)
(Amplifiers, Electron-tube)

BORODIN, D.I.; OYKS, G.N.; TSYKIN, L.V.; KAPUSTIN, I.V.

Measuring the temperature of flue gases in a bessemer converter. Izv. vys. ucheb. zav.; chern. met. 7 no.11:71-74 '64. (MIRA 17:12)

1. Moskovskiy institut stali i splavov.

TSYKIN, L.V.; OYKS, G.N.

Mechanism of the oxidation of impurities in a converter bath. Izv. vys. ucheb. zav.; chern. met. 8 no.9:63-68 '65. (MIRA 18:9)

1. Moskovskiy institut stali i splavov.

OYKS, G.N., kand. tekhn. nauk; SOROKIN, A.A.; KAPUSTIN, I.V.; TSYKIN, L.V.; BORODIN, D.I.; KUTSENKO, A.D.; RUKHITS, G.N.; ZAGREBA, A.V.; UL'YANOV, D.P.; TRUSEYEV, A.I.

Trends in the reorganization of the Bessemer furnace department at the Dzerzhinskii Plant. Met. i gornorud. prom. no.3:28-30 My-Je '64. (MIRA 17:10)

OYKS, G.N., doktor tekhn. nauk; BORODIN, D.I.; TSYKIN, L.V.; KAPUSTIN, I.V.; SOROKIN, A.A.; KUTSENKO, A.D.; ZAGREBA, A.V.; TRUSEYEV, A.A.; REKHLIS, G.N.

Effect of the condition of the slag on the intensity of ejections during the Bessemer production of steel. Met. i gornorud. prom. no.1:24-28 Ja-F '65. (MIRA 18:3)

BORODIN, D.I.; OYKS, G.N.; KAPUSTIN, I.V.; TSYKIN, L.V.

Ejection, fly ash and "explosions" during the bottom blowing of metal in converters. Izv. vys. ucheb. zav.; chern. met. 7 no.9:56-62 '64. (MIRA 17:6)

1. Moskovskiy institut stali i splavov.

OYKS, G.N., doktor tekhn. nauk; BORODIN, D.I.; TSYKIN, L.V.; KAPUSTIN, I.V.; SOROKIN, A.A.; KUTSENKO, A.D.; ZAGREBA, A.V.; REKHLIS, G.N.; TRUSEYEV, A.I.; Prinimali uchastiye: GUBENKO, S.M.; FOMIN, S.I.; KUBLITSKIY, A.M.; SAF'YANOV, V.P.; VOLYNKIN, V.M.

Some problems in the hydrodynamics of a converter bath. Met. i gornorud. prom. no.3:29-31 My-Je '65. (MIRA 18:11)

AID P - 3861

Subject : USSR/Meteorology

Card 1/1 Pub. 71-a - 24/35

Author : Tsykin, E. N.

Title : Repointing a drill for operation in frozen soil

Periodical : Met. i. gidr., 6, 55, N/D 1955

Abstract : The improved performance of the BP-44 drilling machine achieved by cutting out a 70 x 30 cm triangle at its end is described. One diagram.

Institution : None

Submitted : No date

TSYKIN, Ye.N.

Reconnaissance study of the heat content of the upper layer of glaciers. Osn.metod.ukaz.po gliats.issl. no.15:71-78 '57. (MIRA 12:1)

(Glaciers)

TSYKIN, Ye.N.

Reconnaissance thermal sounding and delineation of glaciological zones on Mount Elbrus. Geofiz.biul. no.12:69-73 '62. (MIRA 16:5)
(Elbrus, Mount--Glaciers)

Tsykin, Ye.N.

J-3

USSR/Soil Science - Physical and Chemical Properties of Soils.

Abs Jour : Ref Zhur - Biol., No 3, 1958, 10513

Author : Tsykin, Ye.N.

Inst : Institute of Geography and Institute of Forests, Academy of Sciences USSR

Title : Water Permeability of Frozen Soils and Its Dynamism During the Period of Thaw.

Orig Pub : Sneg i talyye vody. Ikh izucheniye i ispol'zovaniye, Moskva, Akad Nauk SSSR, 1956, 101-111.

Abstract : Investigations were conducted by the Institute of Geography and the Institute of Forests of the Academy of Sciences USSR in the spring of 1954 near Yershov village on the left bank of the Volga by Saratov. Practically speaking, the soils of long-fallow /zalezh'/ fields and fields of stubble did not absorb moisture at temperatures of

Card 1/2

USSR

Abs Jour : Ref Zhur - Biol., No 3, 1958, 10513

J-3

5° - 7° above zero; the tillable layer of autumn fallow /zyab'/, whose average moisture level is 20%, easily absorbed water up to its full capacity. In the forest belt water infiltrated at temperatures of -1° and -2°, explainable by the fact that soil temperature is higher there.

ard 2/2

TSYKIN, Ye.N.

50-1-15/26

AUTHOR: Ivanushkin, B. S.

TITLE: **Additions** to the Suggestion by Ye. N. Tsykin Concerning the Regrinding of the Earth Borer БП-44 (Dopolneniya k predlozheniyu Ye. N. Tsykina po peretochke bura БП-44).

PERIODICAL: Meteorologiya i Gidrologiya 1958, Nr 1, pp. 50-51 (USSR)

ABSTRACT: The article by Ye. N. Tsykin "The Regrinding of the Earth Borer for Work on Hard-Frozen and Tightly Compressed Ground" was published in the periodical "Meteorology and Hydrology" no. 6, 1955. The earth borer БП-44 reground according to Tsykin' method in the practical tests on hard-frozen ground proved not to be very convenient. 1) Considerable physical efforts are necessary during the boring of hard-frozen ground. 2) A great expenditure of time is necessary for boring a bore hole to a depth of 1 m. An additional regrinding of the earth borer is suggested, according to which the work of one laborer is considerably facilitated and the expenditure of time diminished. The reground earth borer easily penetrates grounds of various consistency. Such an earth borer may be widely used in taking a soil-sample for moisture and in determining the freezing-through of the ground. There is 1 figure.

AVAILABLE: Library of Congress

Card 1/1 1. Soils-Moisture content 2. Drilling machines-Maintenance

TSYKIN, Ye.N.

Sharpening an auger for work in frozen and packed soils.
Meteor. i gidrol. no.6:55 N-D '55. (MLRA 9:2)
(Boring machinery)

TSYKIN,G.

TSYKIN,G., professor, doktor tekhnicheskikh nauk; TSYKINA,A., inzhener

Pocket radio receiver. Radio no.11:40-41 N'55. (MLRA 9:1)
(Radio--Receivers and reception)

TSYKINA, Anna Vasil'yevna; NOSOVA, M.N., red.

[Designing of transistor amplifiers] Proektirovanie tranzistornykh usilitelei. Moskva, Sviaz', 1965. 157 p. (MIRA 18:5)

TSYKINA, N.P., inzh.

Increasing the hardness of chill-cast sheet mill rolls made of magnesium cast iron. Stal' 23 [i.e. 24] no.4:334-337 Ap '64. (MIRA 17:8)

1. Lutuginskiy zavod prokatnykh valkov.

TSYKINA, N.P., inzh.; PARSHINA, V.I., inzh.

Casting rolling-mill rolls of boron-alloyed cast iron.
Mashinostroenie no.3:52-54 My-Je '63. (MIRA 16:7)

1. Lutuginskiy zavod prokatnykh valkov.
(Iron founding)

S/185/62/007/011/009/019
D234/D308

AUTHORS: Lyutyy, A.I., Nesterko, N.A., Rossikhin, V.S. and Tsykora, I.L.

TITLE: Study of physical and chemical processes in the equilibrium zone of an acetylene flame

PERIODICAL: Ukrayins'kyy fizychnyy zhurnal, v. 7, no. 11, 1962 1214-1216

TEXT: Metallic Na vapor was introduced into the outer cone of the flame and the effect of its presence on the spectral lines of Rb and Cs was studied. The intensity of the latter increased while that of the Ba and Sr lines became lower indicating a displacement of the ionization equilibrium. This can be used for increasing the sensitivity of spectroscopic analysis. The partial pressure of free electrons in pure flame was determined by spectroscopic methods, adding Sr and Ba to air- and oxy-acetylene flames. The order of magnitude of the result agrees with that of the pressure determined from the saturation current. To increase the sensi-

Card 1/2

tivity of analysis for the alkali and alkaline-earth metals flames with a high concentration of free electrons should be used in the case of atomic lines, and those with a low concentration in the case of ionic lines. There are 1 figure and 2 tables.

ASSOCIATION: Dnipropetrovs'kyy derzhuniversytet (Dnepropetrovsk State University)

SUBMITTED: March 24, 1962

S/185/62/007/011/010/019
D234/D308

AUTHORS: Lyutyy, A.I., Nesterko, N.A., Rossikhin, V.S. and Tsykora, I.L.

TITLE: Study of physical and chemical processes in the reaction zone of acetylene flame

PERIODICAL: Ukrayins'kyy fizychnyy zhurnal, v. 7, no. 11, 1962, 1218-1221

TEXT: A detailed review of literature is given. The authors include the results of experiments in which Ca and Mg were introduced into the flame at atmospheric pressure. Intensity of the Mg lines increased on passing from the outer zone to the reaction zone if the excitation energy of the lines was above 4.4 ev. It is concluded that the excitation is controlled by temperature in the outer zone and is anomalous in the reaction zone; for excitation potentials lower than 5 ev it can be thermal in both zones, above 5 ev it can only be anomalous. There is 1 table and 14 references: 18 Soviet-bloc and 6 non-Soviet-bloc.

Card 1/2

S/185/62/007/011/010/019
Study of physical and chemical ... D234/D308

ASSOCIATION: Dnipropetrovs'kyy derzhuniversytet (Dnepropetrovsk State University)

SUBMITTED: March 24, 1962

Card 2/2

34441
S/185/61/006/006/023/030
D299/D304

11.5100

AUTHORS: Lyutyy, A.I., Nesterko, N.A., Rossykhin, V.S., and Tsykora, I.L.

TITLE: Cases of deviation from the thermodynamic equilibrium in the outer cone of a flame

PERIODICAL: Ukrayins'kyy fizychnyy zhurnal, v. 6, no. 6, 1961 851 - 852

TEXT: On adding various substances to a flame, the authors observed effects related to the absence of thermodynamic equilibrium. Thus, on introducing vapors of metallic magnesium directly into the outer cone of an acetylene-air flame and in a hydrogen-air flame, a small zone appeared (visible with the naked eye) at the spot where the metal vapor met the outer cone of the flame. The spectrum of the zone differs greatly from the spectrum of the rest of the cone. The zone spectrum has a band, contributed by the MgH molecule, as well as a line of the Mg atom. If Cs vapor is also introduced into the zone, the Cs lines λ = 4555 and 4593 Å, become much stronger. Spectral investigations by T.M. Sugden and E.M. Bulewicz (Ref. X

Card 1/3

Cases of deviation from the ...

1: Trans. Farad. Soc., 55, No. 5, 720, 1959) showed that the MgH band does not appear in the spectrum of the outer cone if powdered Mg is introduced. In the experiments conducted by the authors, the conditions for the formation of MgH were more favorable (a large number of atoms, comparatively low temperatures -- of the order of 1000°K). Under these conditions, MgH molecules could be formed by 3 different reactions. An analysis of these reactions shows the absence of thermodynamic equilibrium in the observed zone. If CCl_4 vapor is introduced into the flame together with the air current, then a decrease in the intensity of the lines of the Ca, Sr, Li, Ba, Na, K, Rb and Cs-atoms, is observed. A table shows the values of the electrical conductivity of the flame before and after the introduction of CCl_4; on introducing CCl_4, the electrical conductivity behaves in a different way -- for some elements it increases, whereas for others it increases (or remains unchanged). In the case of Sr, the decrease in electrical conductivity is accompanied by a decrease in the intensity of the ionic Sr-line, whereas an increase in the intensity of the ionic Ba-line is accompanied by a slight increase in conductivity. Hence the presence of CCl_4 in the flame

Card 2/3

not only disturbs the dissociation equilibrium, but may also lead to deviations from the ionization equilibrium. There are 1 figure, 1 table and 2 non-Soviet-bloc references;(including 1 translation). The reference to the English-language publication reads as follows: E.M. Bulewicz, T.M. Sugden, Trans. Farad. Soc., 55, no. 5, 720, 1959.

ASSOCIATION: Dnipropetrovs'kyy derzhavnyy universytet im. 300-richchya vozz'yednannya Ukrayiny z Rosiyeyu (Dnipropetrovs'k State University im. 300-th Anniversary of the Ukraine's Union with Russia)

Card 3/3

X

TSYKOVSKIY, V K

POLUCHENIYE ISKUSSTVENNYKH KISLOT OKISLENIYEM KEROSINOVYKH FRAKTSIY (THE PRODUCTION OF SYNTHETIC ACID BY THE ACIDIFICATION OF KEROSENE FRACTIONS)
LENINGRAD, GOSTOPTEKHIZDAT, 1954.
206 P.Illus., DIAGRS., TABLES.
"LITERATURA" P. (203) -204.

SO: N/5
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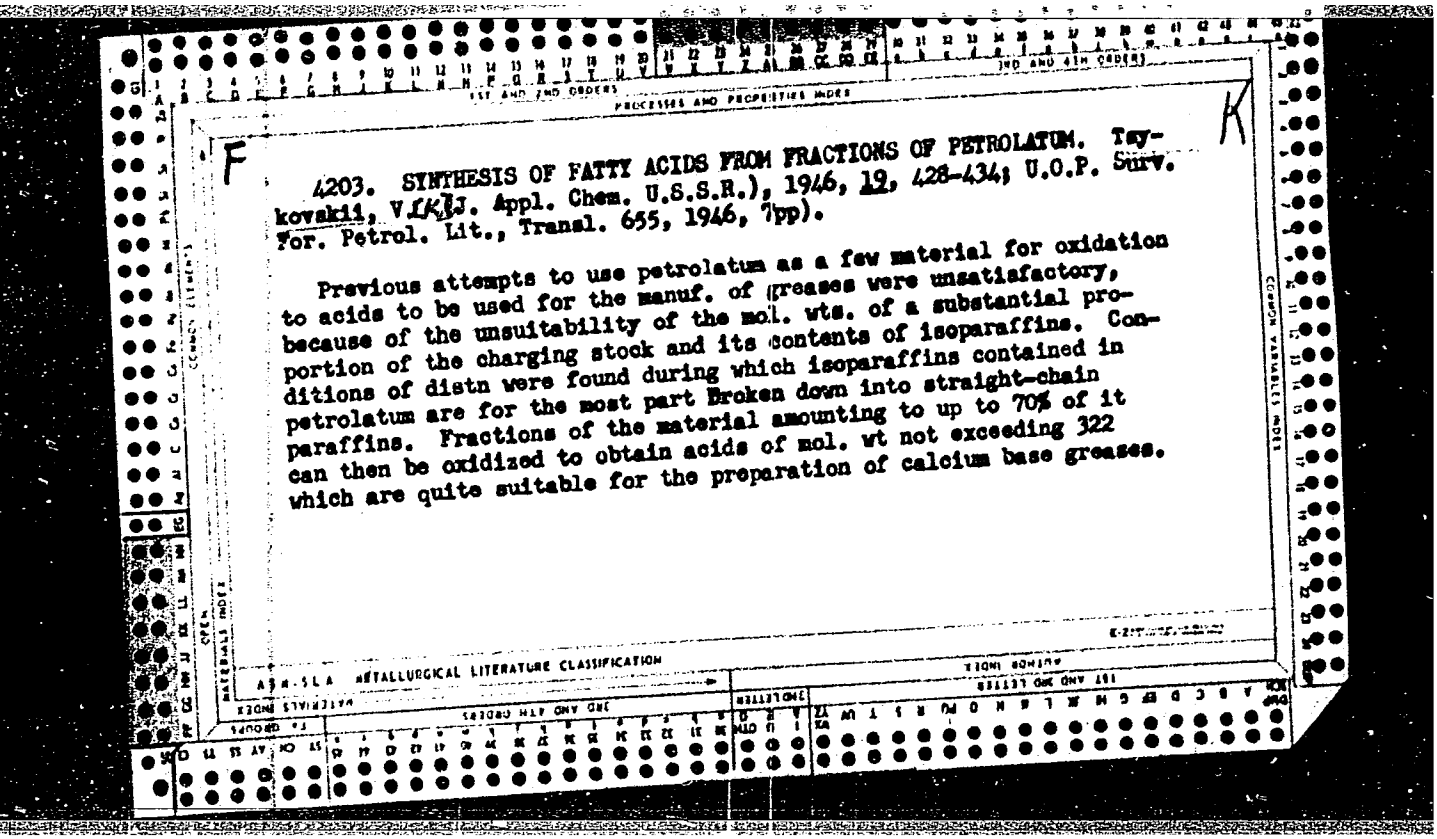
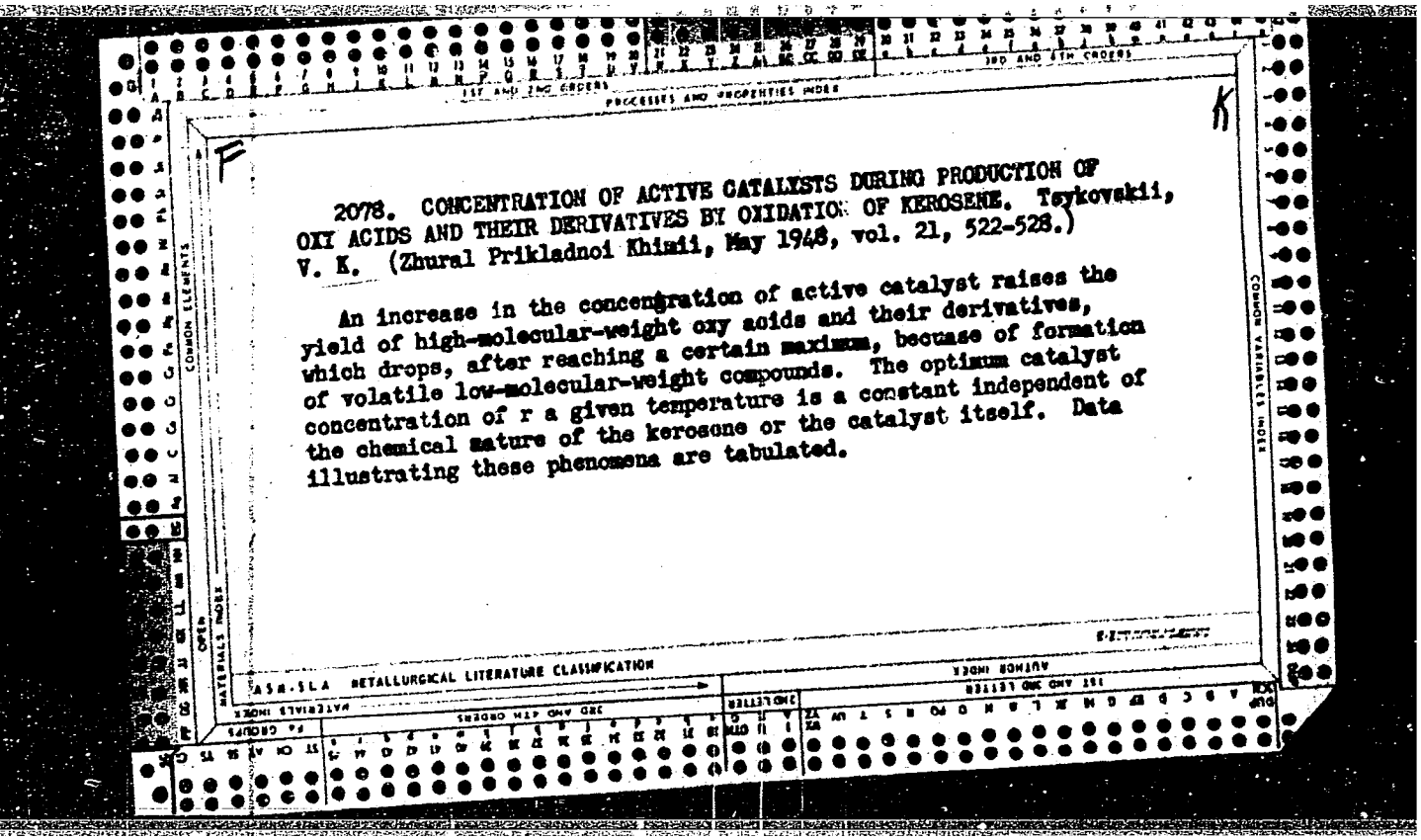


F

4203. SYNTHESIS OF FATTY ACIDS FROM FRACTIONS OF PETROLATUM. Tsykovskii, V.K. [illegible]. Appl. Chem. U.S.S.R.), 1946, 19, 428-434; U.O.P. Surv. For. Petrol. Lit., Transl. 655, 1946, 7pp).

Previous attempts to use petrolatum as a raw material for oxidation to acids to be used for the manuf. of greases were unsatisfactory, because of the unsuitability of the mol. wts. of a substantial proportion of the charging stock and its contents of isoparaffins. Conditions of distn were found during which isoparaffins contained in petrolatum are for the most part broken down into straight-chain paraffins. Fractions of the material amounting to up to 70% of it can then be oxidized to obtain acids of mol. wt not exceeding 322 which are quite suitable for the preparation of calcium base greases.

K



2078. CONCENTRATION OF ACTIVE CATALYSTS DURING PRODUCTION OF OXI ACIDS AND THEIR DERIVATIVES BY OXIDATION OF KEROSENE. Teykovskii, V. K. (Zhural Prikladnoi Khimii, May 1948, vol. 21, 522-528.)

An increase in the concentration of active catalyst raises the yield of high-molecular-weight oxy acids and their derivatives, which drops, after reaching a certain maximum, because of formation of volatile low-molecular-weight compounds. The optimum catalyst concentration of r a given temperature is a constant independent of the chemical nature of the kerosene or the catalyst itself. Data illustrating these phenomena are tabulated.

TSYKOVSKIY, V. K.

Apr 49

USSR/Chemistry - Kerosene
Chemistry - Oxidation

"Oxidation of Fine Fractions of Kerosene," V. K. Tsykovskiy, 4 3/4 pp

"Zhur Prik Khim" Vol XXII, No 4

Studies oxidation of kerosene fractions. Under equal conditions, the rate of oxidation of light hydrocarbons is greater the less the initial volume of the light hydrocarbons in the oxidizing column. Submitted 6 Feb 48.

60/49T30

L 07431-67 EWP(k)/EWT(d)/EWT(m)/EWP(1)/EWP(v)/EWP(t)/ETI LJP(c) JD/HM
ACC NR: AP6030271 (N) SOURCE CODE: UR/0125/66/000/008/0044/0047 46 44 B

AUTHOR: Gotal'skiy, Yu. N.; Tsykulenko, A. K.; Peysin, M. I.

ORG: [Gotal'skiy, Tsykulenko] Institute of Electric Welding im. Ye. O. Paton, AN UkrSSR (Institut elektrosvarki AN UkrSSR); [Peysin] Kharkov Electrotechnical Plant (Khar'kovskiy elektrotekhnicheskiy zavod)

TITLE: Automatic welding of electric motor shafts from dissimilar steels 18

SOURCE: Avtomaticheskaya svarka, no. 8, 1966, 44-47

TOPIC TAGS: inert gas welding, low carbon steel, austenite steel, argon, carbon dioxide, AUTOMATIC WELDING, SHAFT

ABSTRACT: The authors discuss a process developed by the Institute of Electric Welding in cooperation with the Kharkov Electrotechnical Plant for manufacturing shafts in which low-carbon 5 steel (GOST 380-60) is welded to Kh18N9T austenite steel (GOST 5632-61). Circular components 36-60 mm in diameter are welded by this method. While components of this type are most easily joined by resistance welding, this method cannot be used at the Kharkov Electrotechnical Plant at the present time and therefore gas-arc welding is used. Tests show that the best joints are produced by using argon gas and Sv-04Kh19N11M3 electrode wire. The stability of the structure in the heat-affected zone of the weld was tested by holding a welded specimen at 200°C for 200

Card 1/2

UDC: 621.791.756:669.15-194:669.26:669.15-194

L 07431-67

ACC NR: AP6030271 2

hours. The results show no appreciable changes in the structure of the weld zone. The welding is done on a lathe which is slowed to 0.5-10 rpm by an additional speed reducer. A semiautomatic A-929 welding machine with a modified electric circuit is mounted on the lathe. The following conditions are recommended for welding in argon: welding current — 200 a, arc voltage -- 24-26 v, electrode gap — 15-20 mm and rate of gas flow -- 12-17 l/min. Carbon dioxide may be used at the same rate of flow if the arc voltage is reduced to 20-22 v and the electrode gap is narrowed to 10-15 mm. Orig. art. has: 5 figures, 1 table.

SUB CODE: 13/ SUBM DATE: 220ct65/ ORIG REF: 005/ OTH REF: 002

Card 2/2

ACCESSION NR: AP4013082 S/0125/64/000/002/0049/0053

AUTHOR: Gotal'skiy, Yu. N.; Tsy*kulenko, A. K.

TITLE: Investigation of open-arc welding of medium-alloy steels with powder-core wire

SOURCE: Avtomaticheskaya svarka, no. 2, 1964, 49-53

TOPIC TAGS: welding, open arc welding, powder core wire, open arc powder wire welding, medium alloy steel welding, austenitic metal weld

ABSTRACT: The reasons for this powder-core wire composition — 30% Mn, 10% Cr, 0.2% Ti or V — are set forth. V. M. Kir'yakov and D. M. Kushnerev obtained good-quality welds with a ceramic flux and the above wire. Rutile and fluorite concentrate were used as slag-forming agents and marble as a gas-forming agent. The wire was prepared by drawing from a soft low-carbon steel strip. The exact composition "can be learned from the Institute of Electric

Card 1/2

ACCESSION NR: AP4013082

Welding, AN UkrSSR." Medium-alloy 30KhGSA and 30Kh2NM steels were welded by an A-765 semiautomatic machine with a current of 300-350 amp, a voltage of 26-28 v, and a wire diameter of 3 mm. Austenitic weld metal and no cracks in the weld-affected zone were observed even with rigid 15-20-mm-thick pieces welded together. The toxicity of Mn vapors is noted. Orig. art. has: 3 figures and 2 tables.

ASSOCIATION: Institut elektrosvarki im. Ye. O. Patona AN UkrSSR (Institute of Electric Welding, AN UkrSSR)

SUBMITTED: 19Feb63 DATE ACQ: 26Feb64 ENCL: 00

SUB CODE: ML NO REF SOV: 008 OTHER: 005

Card 2/2

GUTAL'SKIY, Yu.N.; TSYKULENKO, A.K.

Investigating the welding of medium-alloy steel using a powder metal wire with internal shielding. Avtom. svar. 17 no.2:49-53 F '64. (MIRA 17:9)

1. Institut elektrosvarki im. Ye.O. Patona AN UkrSSR.

GOTAL'SKIY, Yu.N.; TSYKULENKO, A.K.; KUSHNIRENKO, B.N.

Welding pearlitic with austenitic steels in structures operating at high temperatures. Avtom. svar. 16 no.9:13-18 S '63. (MIRA 16:10)

1. Institut elektrosvarki im. Ye.O.Patona AN UkrSSR.

TSYKUNOV, A.Ye., kand.tekhn.nauk (g.Gomel')

Improving car design and reducing the empty weight of cars. Zhel. dor.transp. 42 no.5:60-62 My '60. (MIRA 13:9)
(Railroads--Cars--Construction)

1. TSYKUNOV, K.

2. USSR (600)

4. Donets Basin - Coal-Mining Machinery

7. Automatization in the mines of the Donets Coal Basin. Mast. ugl. no. 10: 29. 1952

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

L 10785-66 FBD/EWT(1)/EEC(k)-2/T/EWP(k)/EWA(m)-2/EWA(h) SCTB/IJP(c) WG/GG
ACC NR: AP5028927 SOURCE CODE: UR/0185/65/010/011/1267/1270

AUTHOR: Livshyts', B. L.; Tsykunov, V. M.

ORG: Institute of General and Inorganic Chemistry im. M.S. Kurnakov, AN SSSR, Moscow (Instytut zahal'noyi ta neorganichnoyi khimii AN SRSR)

TITLE: Generation of induced radiation under the prestationary condition

SOURCE: Ukrayins'kyy fizychnyy zhurnal, v. 10, no. 11, 1965, 1267-1270

TOPIC TAGS: quantum generator, quantum electronics, electron optics

ABSTRACT: The article considers the nature of the transition of an optical quantum generator into a stationary condition, reduced to the solution of the following system of equations:

$$\frac{dn}{dt} = -\frac{n-n_0}{\tau} - \sum_i Dg_i n P_i,$$

$$\frac{dN_i}{dt} = -\gamma_i N_i + \int_0^L Dg_i n P_i dz,$$

when differences of n and N_i from n_c and N_{ic}, corresponding to stationary conditions, can be considered small as compared with n_c and N_{ic}. This case is termed the prestationary

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L 10785-66

ACC NR: AP5028927

condition. In the equations n is the overpopulation of the upper level of the working transition, n_0 is the overpopulation of the same level which occurs in the absence of induced radiation, τ is a quantity which at low filling practically coincides with the life-span of the active centers in the excited state, g_i is the ordinate of the luminescent line which corresponds to the frequency of the second mode, D is the quantity proportional to the Einstein coefficient for the induced transition, N_i is the doubled number of photons in the i^{th} mode, γ_i is the loss coefficient per photon per unit time, L is the optical length of the resonator and $P_i = N_i(t)\,(1-\cos\frac{2\pi m_i}{L} z)$. Authors express their gratitude to Academician AN SSSR I. V. Obreymov for his attention and interest in this work and also to Ch. K. Mukhtarov for valuable discussions. Orig. art. has: 19 formulas.

SUB CODE: 20 / SUBM DATE: 03Aug65 / ORIG REF: 005 / OTH REF: 003

Card 2/2

TSYKUNKOVA, N.A.; UL'YANOV, N.K.

Occurrences of metals in eluvial and talus formations of some ore deposits in central Kazakhstan. Inform.sbor.VSEGEI no.50:71-81 '61. (MIRA 15:8)

(Kazakhstan--Metals, Rare and minor)
(Kazakhstan--Nonferrous metals)

SAVOSINA, L.F.; TSYKUNOVA, T.M.; CHERTKOV, Yu.V.

Use of electronic contouring to improve the discernibility of Fresnel rings. Opt. i spektr. 17 no.1:122-128 Jl '64. (MIRA 17:9)

ACCESSION NR: AP4042988 S/0051/64/017/001/0125/0128

AUTHORS: Savosina, L. F.; Tsy*kunova, T. M.; Chentsov, Yu. V.

TITLE: Use of electronic outlining to improve the distinguishability of Fresnel rings

SOURCE: Optika i spektroskopiya, v. 17, no. 1, 1964, 125-128

TOPIC TAGS: electron microscope, astigmatism, diffraction analysis, video amplifier

ABSTRACT: The authors describe an electronic circuit for intensifying the outlines of images used in electron microscopes, for the purpose of minimizing astigmatism. The method is based on using a television image amplifier in the electron microscope in lieu of photography to observe the Fresnel rings and other diffraction edge patterns, and on the fact that the information that is used to eliminate the astigmatism is contained essentially in the contours

Card 1/3

ACCESSION NR: AP4042988

of the image. The electronic outlining circuit increases the visibility of the diffraction edges, and operates on the principle of adding the second difference of the video signal (obtained with the aid of an open delay line and a subtracting network to the initial video signal, combined with the use of double limiting. "The authors thank V. N. Vertsner and I. I. Tsukkerman for interest in the work and for many valuable hints. Orig. art. has: 4 figures.

ASSOCIATION: None

SUBMITTED: 18Jul63 ENCL: 01

SUB CODE: EC NR REF SOV: 001 OTHER: 001

Card 2/3

ACCESSION NR: AP4042988

ENCLOSURE: 01

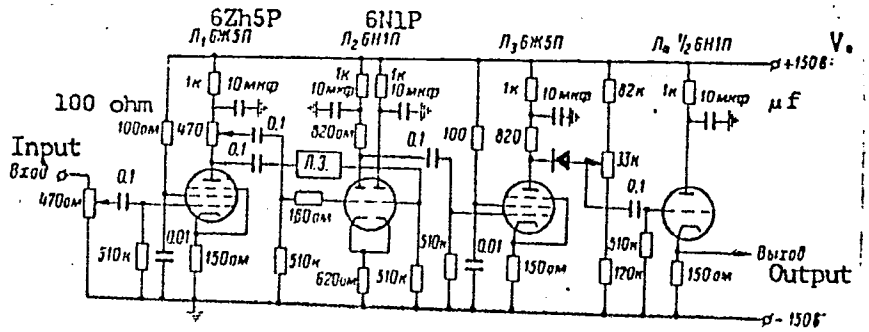

Diagram of video signal outlining block

Card 3/3

27.2000 (1080,1051)
6.9000

S/020/61/136/003/027/027
B016/B052

AUTHORS: Glezer, V. D., Tsukkerman, I. I., and Tsykunova, T. M.

TITLE: The Dependence of the Throughput of Eyesight on Brightness

PERIODICAL: Doklady Akademii nauk SSSR, 1961, Vol. 136, No. 3, p. 720

TEXT: The authors studied the dependence of the throughput of eyesight on brightness. They define this throughput as the maximum information which is conveyed to the brain via eyesight within a certain time unit. Under optimum conditions of visual observation, this throughput attains some dozens of binary information units per second (Ref. 1). In their experiments, the authors followed G. S. Sziklai's methods (Ref. 1) except for brightness variations by neutral filters. The test persons were well trained in identifying eight standard objects (order of magnitude of 2 - 4 angular degrees) contrasting by approximately 80%. These objects were shown to them in random sequence. The throughput was measured as being C=H/T binary units per second, where T denotes the period of time necessary for the correct identification of an object, $H = \log_2 B = 3$

89738

The Dependence of the Throughput of Eyesight on Brightness

S/020/61/136/003/027/027
B016/B052

binary units, i.e. the information conveyed to the brain. Fig. 1 shows the dependence of C on the logarithm of the ratio between the brightness B and initial brightness B_0 (B_0 has an order of magnitude of 100 asb in white light). At lower brightness levels, the throughput increases as the logarithm of brightness increases (Ref. 2). If the brightness in this section is doubled, the throughput is increased by approximately 10 binary units per second. The authors compare the linear dependence of C on $\log_2 B$ with the linear dependence of the visual acuity on $\log_2 B$, and express the assumption that a change in the volume of the optic foramen (Ref. 3) forms the basis for the mechanism of the increase in the throughput in this section. A further increase of brightness (under the given experimental conditions) did not render the identification of objects less accurate.
[Abstracter's note: This is nearly a full translation from the original.]
There are 1 figure and 3 references: 2 Soviet.

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89738

The Dependence of the Throughput of Eyesight on Brightness

S/020/61/136/003/027/027
B016/B052

ASSOCIATION: Institut fiziologii im. I. P. Pavlova Akademii nauk SSSR (Institute of Physiology imeni I. P. Pavlov of the Academy of Sciences USSR)

PRESENTED: July 28, 1960, by V. N. Chernyshevskiy, Academician

SUBMITTED: July 26, 1960

X

Card 3/3

TSYLADZE, T.E.

The distribution of phosphorous compounds in cows milk.

P. A. KOMETIANI and T.E. TSYLADZE (BIOCHEMICAL LAB. OF THE ZOOTECHNICAL & VETERINARY INST. TIFLIS) vol. 1, no.6, p.692, 1936.

DRUZHININ, N.S.; TSYLBOV, P.P.; RYAZANOV, A.V., kand. tekhn. nauk, retsenzent; DANILOV, L.N., inzh., red.; MODEL', B.I., tekhn. red.

[Course in mechanical drawing] Kurs cherchenija. Moskva, Mashgiz, 1964. 491 p. (MIRA 17:2)

TSYLBOV, P.P.

DRUZHININ, N.S.; TSYLBOV, P.P.; SHKOL'NIK, K.A.; SHCHUKIN, S.M., dotsent, retsenzent; SHIKIN, S.V., kandidat pedagogicheskikh nauk, retsenzent; SHELKOVNIKOV, G.I., inzhener, redaktor; MODEL', B.I., tekhnicheskiy redaktor; POPOVA, S.M., tekhnicheskiy redaktor

[Course in mechanical drawing] Kurs cherchenila. Izd. 2-e, ispr. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. i sudostroit. lit-ry. Pt.1. [Geometric drawing; mechanical drawing technique and geometric construction] Geometricheskoe cherchenie; tekhnika cherchenila i geometricheskie postroenila. 1954. 220 p. (MLRA 7:9)
(Mechanical drawing)

DRUZHININ, Nikolay Sergeyevich; TSYLBOV, Petr Petrovich; SHCHUKIN, S.M., dotsent, retsenzent; SHIKIN, S.V., kand.pedagog.nauk, retsenzent; SHELKOVNIKOV, G.I., inzh., red.; YEGORKINA, L.I., red.izd-va; SMIRNOVA, G.V., tekhn.red.

[Course in mechanical drawing] Kurs cherchenila. Izd.2., ispr. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry. Pt.2. [Projectional drawing; orthogonal, azonometric projections, and technical sketching] Proektsionnoe cherchenie; ortogonal'nye, aksonometricheskie proektsii i tekhnicheskoe risovanie. 1960. 311 p. (MIRA 13:9)

(Mechanical drawing)

DRUZHININ, N.S.; TSYLBOV, P.P.; SHKOL'NIK, K.A.

[Drawing course. Part 1; geometric drawing (drawing technique and geometric structures)] Kurs cherchenija. Chast' 1; geometricheskoe cherchenie (tekhnika cherchenija i geometricheskie postroenija). Moskva, Gos.nauchno-tekhn. izd-vo mashinostroit.lit-ry, 1953- . (MLRA 6:8)
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DRUZHININ, N.S.; TSYLBOV, P.P.; SHCHUKIN, S.M., dotsent,retsenzent; SHIKIN, S.V., kandidat pedagogicheskikh nauk,retsenzent; SHELKOVNIKOV, G.I, inzhener, redaktor; POPOVA, S.M., tekhnicheskiy redaktor

[Course in drawing] Kurs cherchenila. Moskva, Gos. nauchno-techn. izd-vo mashinostroit. lit-ry. Pt.2.[Projection drawing (perpendicular, axonometric projection and technical drawing)] proektsionnoe cherchenie (priamougol'nye, aksonometricheskie proektsii i tekhnicheskoe risovanie). 1954. 323 p. (MLRA 8:7)
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Valveless pile extractor. Stroi.i.dor.machinostr. 1 no.1:22-23 Ja '56.
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28299

Gidratatsiyai elyektrichyeskaya simmyetriya molyekul dyenaturirovannogo i nativnogo yaichnogo albbumina. Doklady akad nauk SSSR, Novaya syeriya T. LXVIII, No. 2, 1949, S. 349-52 Bibliogr: 13 nazv.
zh. Botanika

SO. LETOPIS NO. 34

8 (6) SOV/91-59-11-11/27

AUTHOR: Tsylev, A.L., Engineer

TITLE: Methods of Installing Fixtures for Electrical Equipment When Simultaneously Performing Construction Work

PERIODICAL: Energetik, 1959, Nr 11, pp 17-19

ABSTRACT: The Sverdlovskoye montazhnoye upravleniye tresta "Uralelektromontazh" (Sverdlovsk Assembly Department of the "Uralelektromontazh" Trust) introduced the installation of electrical equipment fixtures simultaneously when performing the basic construction work of buildings. A qualified electrician coordinates this work with the foreman of the construction laborers and checks the correct installation of the fixtures. This system was used during the construction of a compressor and pumping station building and a power substation at the Pervoural'skiy novotrubnyy zavod (Pervoural'sk New Pipe Rolling Mill). Fixtures, supports of bus bars and lamps, tubes for cables and other equipment were delivered to the construction site when the construction of the

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Methods of Installing Fixtures for Electrical Equipment When Simultaneously Performing Construction Work

buildings began. During the construction of the substation building alone, a total of 782 rubles were saved. The location and type of electrical equipment fixtures should be included in the basic construction plans of new buildings. There are 6 photographs and 1 table.

TSYLEV, A.L., inzh.

Use of tubing made of paper and metal in electric assembly operations. Mont. i spets. rab. v stroi. 23 no.10:21-22 O '61. (MIRA 14:10)

1. Trest Uralelektromontazh.
(Electric conduits)