IVANOV, I.D.; RAKHLEYEVA, Ye.Ye.; KRYLOVA, V.G.

Polarographic wave and catalytic activity of chymotrypsin
in the presence of a substrate, inhibitor, and DNA in the
process of irradiation with ultraviolet light. Ukr.biokim.
zhur. 34 no.6:853-862 '62.   (MIRA 16:4)

1. A.N.Bach Institute of Biochemistry of the Academy of Sciences
of the U.S.S.R.
        (CHYMOTRYPSIN)   (ULTRAVIOLET RAYS)   (POLAROGRAPHY)

IVANOV, I.D.; RAKHLEYEVA, Ye.Ye.; KRYLOVA, V.G.

Polarography of typsin in the presence of a substratum and
an inhibitor during irradiation with ultraviolet light. Ukr.
biokhim.zhur. 34 no.5:678-687 '62.   (MIRA 16:4)

1. Institut biokhimii im. A.N.Bakha AN SSSR.
    (TRYPSIN)   (ULTRAVIOLET RAYS)   (POLAROGRAPHY)

IVANOV, I.D.; BAKHIREVA, Ye.Ye.

Effect of ultraviolet light and B. subtilis gelatin and amylase substrates on the polarographic wave and catalytic activity of subtilisin. Biofizika 8 no.3:349-353 '63.

(MIRA 17:1)

1. Institut biokhimii imeni Bakha AN SSSR, Moskva.

IVANOV, I.D.; RAKHLEYEVA, Ye.Ye.

Polarographic study of metallic complexes of DNA with B. subtilis
proteinase. Ukr. biokhim. zhur. 35 no.2:207-219 '63.   (MIRA 17:9)

1. A.N.Bakh Institute of Biochemistry of the Academy of Sciences of
the U.S.S.R.,Moscow.

IVANOV, I.D.; RAKILEYEVA, Ye.Ye. [Rakhliolava, E.E.]

    Comparative polarography of teriary protein structure. Ukr. biokhim.
    zhur. 36 no.2:163-174 '64.   (MIRA 17:11)

    1. Institute of Microbiology of the Academy of Sciences of the U.S.S.R.
    Moscow.

VORONOV, G.T.; IVANOV, I.D.; RAKHLEYEVA, Ye.Ye.

Nature of the polarographic wave of cobalt in the presence of protein substances. Dokl. AN SSSR 157 no.1:194-197 Jl '64

1. Institut mikrobiologii AN SSSR. Predstavleno akademikom N.N. Semenovym.

L 6843-65   Pa-4   AMD

s/0020/64/157/003/0703/0706

... no. , 1964, 703-706

glucomutase, cytochrome C ribonuclease, lysozyme, protein

ABSTRACT: Denaturation of globular proteins is seen in a reduction of the height
of the second step (b) of the polarographic

L 6845-65
ACCESSION NR: AP4042800

Irradiation lasted 15-200 minutes for com-

a specific rate of multiformity of aglobular particles.

ASSOCIATION: Institut mikrobiologii Akademii nauk SSSR (Institute of Microbiology, Academy of Sciences, SSSR)

ACCESSION NR: AP4042800

SUBMITTED:

IVANOV, I.D.; RAKHLEYEVA, Ye.Ye.

Use of polarography in the study of the teriary protein struc-
ture. Izv. AN SSSR Ser. biol. no.2:298-305 Mr-Ap'64.

(MIRA 17:3)

1. Institute of Biochemistry, Academy of Sciences of the
U.S.S.R., Moscow.

VAIS?V, I.D.; KACHEROVA, Yo Ye.

Polarography of tertiary protein structure. Dokl. AN SSSR
157 no. 2:469-472 Jl '64.   (MIRA 17:7)

1. Institut mikrobiologii AN SSSR. Predstavleno akademikom
N.M.Sisakyanom.

IVANOV, I.D.; RAKHLEYEVA, Ye.Ye.

Study of the glovular structure of proteins by the polarography method. Izv. AN SSSR. Ser. biol, no.6:883-893 N-D '64.

(MIRA 17:11)

1. Institute of Microbiology, Academy of Sciences of U.S.S.R., Moscow.

IVANOV, I.D.; IL'INA, T.K.; SITONITE, Yu.P.

Current views on the mechanism of biological fixation of molecular
nitrogen. Mikrobiologiia 33 no.3:540-547 My-Je '64.

(MIRA 18:12)
1. Institut mikrobiologii AN SSSR, Moskva. Submitted January
27, 1964.

MOLODOVA, G.A.; IVANOV, I.D.; NIKOLAYEV, G.M.

Role of calcium ion in maintaining the conformation and active center of α-amylase in Aspergillus oryzae. Izv. AN SSSR.Ser.biol. no.3:359-367 My-Je '65.
(MIRA 18:5)

1. Institut fermentnoy i spirtovoy promyshlennosti, Moskva.

IVANOV, I.D.; MOLCHOVA, G.A.; RAKHLEYEVA, Ye.Ye.

Role of H-bond in the maintenance of the conformation and formation of enzyme-substrate complex of α-amylase of Aspergillus oryzae. Izv. AN SSSR. Ser. biol. no.2:257-273 Mr-Ap '65.

(MIRA 18:4)

1. All-Union Distillery and Enzyme Industry Research Institute, Moscow.

IVANOV, I.D.; SITONITE, Yu.F.; BELOV, Yu.M.

     Nitrogen fixation as a hydrogen-acceptor process. Mikrobiologiia
     34 no.2:193-199 Mr-Ap '65.   (MIRA 18:6)

     1. Institut mikrobiologii AN SSSR.

IVANOV, I.D.; BISTRITSKAYA, C.S.

Effect of iron and coppe on the hydrate film of the molecule of alcohol dehydrogenase of yeast as studied by polarography. Dokl. AN SSSR 165 no.3:701-703 N '65. (MIRA 18:11)

1. Institut mikrobiologii AN SSSR. Submitted July 22, 1965.

IVANOV, I.D.; DEMINA, N.S.

Fixation of molecular nitrogen as related to the electron donor
system of respiration and photosynthesis. Izv. AN SSSR. Ser. biol.
31 no.1:115-120 Ja-F '66.
(MIRA 19:1)

1. Institut mikrobiologii AN SSSR. Submitted May 12, 1965.

ACC NR: AP7000146

AUTHOR: Ivanov, I. D.

ORG: Acoustics Institute, AN SSSR, Moscow (Akusticheskiy institut AN SSSR)

TITLE: On the problem of integral representation of a point radiator field in a layered-inhomogeneous medium

SOURCE: Akusticheskiy zhurnal, v. 12, no. 4, 1966, 443-448

TOPIC TAGS: acoustic wave, wave propagation, Green function, complex function, inhomogeneous gas

ABSTRACT: The field of directional emission in a layered-inhomogeneous medium is studied analytically. Given is an inhomogeneous liquid layer lying between homogeneous liquid media $z > z_1$ and $z < -z_2$. The problem consists of finding the solution to the equation

$$\frac{1}{r}\frac{\partial}{\partial r}\left(r\frac{\partial p}{\partial r}\right) + \frac{1}{r^2}\frac{\partial^2 p}{\partial \varphi^2} + \frac{\partial^2 p}{\partial z^2} - \frac{1}{\rho}\frac{\partial \rho}{\partial z}\frac{\partial p}{\partial z} + k^2 p = 0, \quad k = \frac{\omega}{c}$$

in the inhomogeneous layer satisfying the radiation-radiator conditions at $z = z_1$ and $z = -z_2$

$$p = \sum_{n=0}^{\infty} h_n^{(1)}(kR) \sum_{m=0}^{\infty} (A_{nm}\cos m\varphi + B_{nm}\sin m\varphi)P_n^m(\cos\theta).$$

Card 1/3

ACC NR: AP7000146

The solution for the first equation is given by

$$p = F(z, s) H_m^{(1)}(krs)(a_m \cos m\varphi + b_m \sin m\varphi)$$

where H_m is a Hankel function, and $F(z,s)$ satisfies the equation

$$\frac{d}{dz}\left[\frac{\rho(z')}{\rho(z)}\frac{dF}{dz}\right] - k^2 \frac{\rho(z')}{\rho(z)}(s^2 - n^2)F = 0, \quad n = n(z) = \frac{c(z')}{c(z)}$$

To solve the last equations, a Green's function $G(z, z', s)$ is constructed, with the asymptotic solution for $|s| \to \infty$ given by

$$\gamma_1 = -ks, \quad \gamma_2 = ks,$$

$$G(z, z', s) = -\frac{1}{2ks} e^{\mp ks|z - z'|}, \quad s' \gtrless 0.$$

In the vicinity of $z = z'$ the solution for the Green's function yields

$$G(z, z', s) = \begin{cases} \dfrac{i}{2k\sqrt{1 - s^2}} e^{ik\sqrt{1-s^2}(z-z')} + \Gamma_1 & \text{at } z > z', \\[4mm] \dfrac{i}{2k\sqrt{1 - s^2}} e^{ik\sqrt{1-s^2}(z-z')} + \Gamma_2 & \text{at } z > z', \end{cases}$$

where $\Gamma_1 = \Gamma_2$ at $z = z'$. Substituting this in the general solution for p yields the Brekhovskikh formula given by

$$p = \sum_{n=0}^{\infty}(-i)^n \sum_{m=0}^{n} \varepsilon_m i^m (A_{nm} \cos m\varphi + B_{nm} \sin m\varphi) I_{nm}(r, z, z').$$

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ACC NR: AP7000146

where

$$I_{nm}(r, z, z') = \int_{-\frac{\pi}{2}+i\infty}^{\frac{\pi}{2}-i\infty} \frac{G_1(z, z', \vartheta)}{1 - V_1 V_2} H_m^{(1)}(kr \sin \vartheta) P_n^m(\cos \vartheta) \sin \vartheta \, d\vartheta,$$

$$G_1(z, z', \vartheta) = \begin{cases} (1 + V_2) f_1(z) & \text{at} \quad z' < z < z_1 \\ (1 + V_1) f_2(z) & \text{at} \quad -z_2 < z < z_1 \end{cases}$$

Orig. art. has: 44 equations.

SUB CODE: 20/ SUBM DATE: 04Jan65/ ORIG REF: 001/ OTH REF: 001

Card 3/3

L 34786-66   EWT(m)

ACC NR: AR6017216

AUTHORS: Ivanov, I. D.; Khazanov, B. I.

SOURCE CODE: UR/0058/65/000/012/A062/A062

TITLE: Broadband recorder with detector switching

SOURCE: Ref. zh. Fizika, Abs. 12A532

REF SOURCE: Tr. Soyuzn. n.-i. in-ta priborostr., vyp. 2, 1965, 57-60

TOPIC TAGS: radioactive source, radioactivity measurement, radiation counter, recording equipment, RADIATION DETECTOR

ABSTRACT: A broadband recorder for radioactive radiation of the discrete type is described, in which two detectors are used, one permanently connected to the input of the counting circuit, and the other switched over in accordance with the radiation level. In such a system, recording up to a definite intensity takes place with counters C_1 and C_2 operating in parallel. When the intensity rises, counter C_1 is disconnected and only counter C_2 is used for the recording. With decreasing intensity the counter C_1 is again switched in. N. Zevina [Translation of abstract]

SUB CODE: 18

Card 1/1 FV

IVANOV, I.D. [translator]; BREKHOVSKIKH, L.M., red.; GESSEN, L.V., red.; NIKIFOROVA, A.N., tekhn.red.

[Propagation of sound in the ocean. Translations of periodical articles from English] Rasprostranenie zvuka v okeane; sbornik statei. Pod red. L.M.Brekhovskikh. Moskva, Izd-vo inostr.lit-ry, 1951. 214 p.

(MIRA 12:5)

(Underwater acoustics)

Brehovskii, L. M. and Ivanov, L. P. On the extension of the limits of applicability of ray theory in an investigation of the propagation of waves in stratified media. Doklady Akad. Nauk SSSR (N. S.) 83, 545–548 (1952). (Russian)

The authors are concerned with propagation in plane stratified media. The half-space $z < 0$ is assumed homogeneous, the dielectric constant is assumed to be a continuous function of z. By considering the special case of linearly decreasing dielectric constant:

$$\varepsilon = 1 - az \text{ for } z > 0, \quad \varepsilon = 1 \text{ for } z \leq 0,$$

the author concludes that ray theory is valid for angles of incidence (from normal incidence) to $z = \pi/2 - (a\lambda/2\pi)^{1/3}$. For almost glancing incidence (angle greater than $\pi/2 - (a\lambda/2\pi)^{1/3}$) the field does not penetrate far, and the dielectric constant can be approximated by a linearly varying one.

J. Shmoys (New York, N. Y.).

$1 - F/W$

2392. Brekhovskikh, L. M., and Ivanov, I. D., On one special form of damping in wave propagation in faintly inhomogeneous media (in Russian), Acoustics Inst., Akad. Nauk SSSR, Nov. 1954 (translated from Russian by M. D. Friedman, 572 California St., Newtonville, Mass., 12 pp.)

From solutions by first author in previous papers, solution of wave equation is constructed for a two-layer model: bottom layer is homogeneous; in upper layer, wave velocity decreases linearly with distance from interface. The greater this rate of decrease, the more energy is "drawn off" through refraction into the upper layer, and therefore the greater the departure of attenuation in the homogeneous layer from the inverse square law. Some numerical values for this damping are given.

M. Wurtele, USA

4913.   ONE PARTICULAR FORM OF ATTENUATION IN
WAVE PROPAGATION IN LAMELLAR NONUNIFORM MEDIA.
L.M.Brekhovskikh and I.D.Ivanov.
Akust. Zh., Vol. 1, No. 1, 23-30 (1955). In Russian.

The propagation is considered of waves in a layer bounded
on one side by a nonuniform medium in which the velocity of
propagation falls off with distance from the layer boundary.
It is shown that in these conditions propagation is associated
with an additional weakening caused by energy being "siphoned
off" from the waves into the nonuniform medium. The full
theory of the effect is given and its magnitude determined.
                                        C.R.S.Manders

Acoustics Inst. AS USSR, Moscow

Ivanov, I. D.

USSR/ Physics - Sound propagation

Card 1/1   Pub. 86 - 12/39

Authors   :   Ivanov, I. D.

Title   :   Extremely prolonged propagation of sound in the sea

Periodical :   Priroda 44/3, 85 - 88, Mar 1955

Abstract   :   An analysis is made of the complex modification of the law of
                diminishing energy of propagation (by the square of the dis-
                tance) when sound is propagated in the sea, due to reflection
                from the surface and the bottom, where it is partially ab-
                sorbed, all in accordance with the principles on which the
                system of sound fixing and ranging is based. Five references;
                4 Soviet, 1 U S A , (1948 - 1951).   Diagrams.

Institution :   Academy of Sciences, USSR, Acoustic and Institute

Submitted   :   .....

BREKHOVSKIKH, L.M., doktor fiziko-matematicheskikh nauk; BYALOVA, V.V.;
IVANOV, I.D., kandidat fiziko-matematicheskikh nauk; ISAKOVICH,
M.A., doktor fiziko-matematicheskikh nauk, redaktor; RABINOVICH,
N.Ya., redaktor; ROZENBERG, L.D., doktor tekhnicheskikh nauk,
redaktor; TARTAKOVSKIY, B.D., kandidat tekhnicheskikh nauk.
GUROV, K.P., redaktor; GRAKOVA, Ya.D., tekhnicheskiy redaktor.

[Scientific literature on acoustics during the years 1945-1949]
Nauchnaia literatura po akustike za 1945-1949 gg. Moskva, 1955.
276 p.   (MLRA 8:12)

1. Akademiya nauk SSSR. Komissiya po akustike. 2. Chlen-korres-
pondent AN SSSR (for Brekhovskikh)
      (Bibliography—Sound)

GORN, L.S.; IVANOV, I.D.; KHAZANOV, B.I.

Characteristics of a precision single-channel amplitude
analyzer. App.dlia iad. spek. no.1:93-108 '60.

(MIRA 14:8)

(Spectrometer)

GORN, L.S.; IVANOV, I.D.; KHAZANOV, B.I.

Automation of measurements of amplitude distribution.
App.dlia iad. spek. no.1:109-115 '60.   (MIRA 14:8)
                (Spectrometer)

ACCESSION NR: AR4022430   S/0058/64/000/001/A027/A027

SOURCE: RZh. Fizika, Abs. 1A256

AUTHOR: Gorn, L. S.; Ivanov, I. D.; Khazanov, B. I.

TITLE: Single channel amplitude-time transistorized analyzer

CITED SOURCE: Tr. 5-y Nauchno-tekhn. konferentsii po yadern. ra-
dioelektronike.   T. 2. Ch. 1. M., Gosatomizdat, 1963, 107-113

TOPIC TAGS: amplitude time analyzer, transistorized analyzer, single
channel analyzer, two dimensional analyzer, anticoincidence circuit,
differential discriminator

TRANSLATION: A single-channel amplitude-time transistorized analy-
zer, which is the simplest variant of a two-dimensional analyzer,
is described.   The analyzer has two inputs, one for the investigated
pulses from the pickup and the other for the starting signal.   The

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ACCESSION NR: AR4022430

signals from the pickup are selected by a single-channel differen-
tial discriminator which turns on the amplifier, the upper and lower
level discriminators, and the anticoincidence selection circuit.
The starting signal triggers in succession two stages that generate
signals of fixed duration; one sets the delay of the time interval
relative to the starting signal and the other sets the magnitude of
this interval. The pulse from the timing channel opens a gating
unit whose pulses are fed to the recorder. The latter fixes the
number of pulses corresponding to a definite radiation energy and
lying within a definite time interval, which can be shifted relative
to the starting signal. The operation of individual analyzer ele-
ments and units is examined in detail. L. I.

DATE ACQ: 03Mar64   SUB CODE: PH

ESCL: 00

Card/2

L 34796-66   EWT(d)/EWP(1)   IJP(c)   BB/GG

ACC NR: AR6017203

AUTHOR: Ivanov, I. D.; Khazanov, B. I.

SOURCE CODE: UR/0058/65/000/012/A035/A035

TITLE: Economical transistor flip-flop with additional symmetry

SOURCE: Ref. zh. Fizika, Abs. 12A328

REF SOURCE: Tr. 6-y Nauchno-tekhn. konferentsii po yadern. radioelektron. T. 1. M., Atomizdat, 1964, 119-126

TOPIC TAGS: transistorized circuit, flip flop circuit, silicon transistor, silicon diode

ABSTRACT: The power consumed by scaler devices can be reduced by replacing the classical symmetrical flip-flop with a silicon-transistor filp-flop circuit having additional symmetry. In such a circuit, which contains two transistors of different conductivity types and five silicon semiconductor diodes, both transistors are cut-off or conducting simultaneously, and in the conducting state the current consumed can amount to ~175 µa at 6 volts. The flip flops operate well in cascade or ring circuits and make it easy to obtain an analog indication of state. A decade cell is also described, whose operating reliability is not lower than that of a binary counter, owing to application of an operational signal to the flip flops, which do not change their state at the given instant under the influence of the input signal. V. P. [Translation of abstract]

SUB CODE: 09

Card 1/1

L 35369-66   EWT(1)

ACC NR: AR6017792

SOURCE CODE: UR/0058/66/000/001/A044/A044

AUTHOR: Gorn, L. S.; Zhurina, L. S.; Ivanov, I. D.

TITLE: Circuits for m-fold coincidences of signals from K detectors

SOURCE: Ref. zh. Fizika, Abs. 1A398

REF SOURCE: Tr. 6-y Nauchno-tekhn. konferentsii po yadern. radioelektron. T. 1. M., Atomizdat, 1964, 127-132

TOPIC TAGS: coincidence circuit, computer circuit, pulse amplitude, particle detector, adder

ABSTRACT: It is noted that the many practical cases, when registering coincidences of signals from several pickups (for example, using K detectors), it is of interest to construct a system that registers separately cases of coincidences of different multiplicity, i.e., operation of all K detectors, and also of arbitrary combinations of K-1, K-2, etc. detectors, and in the general case the operation of an arbitrary number (m) out of K detectors. A description of such a system is presented. Its construction is based on the principle of a summing mixer, when the signals from each of the detectors are normalized in amplitude and duration, and are then summed. The amplitude of the signal after addition turns out to be proportional to the number of detectors operating after a time τ, where τ is the duration of the normalized signals and the resolving time of the coincidence circuits. The main units of the proposed system are signal shapers and a summing mixer; amplitude discriminators and registers

Card 1/2

IVANOV, I. D.; TODOROV, T.

Inhibition of causative agents of tuberculosis with xanthogenates.
Izv. mikrob. inst., Sofia 7:97-101 1956.

(MYCOBACTERIUM TUBERCULOSIS, effect of drugs on,
    xanthogenates (Bul))
(SULFIDES, effects,
    xanthogenates on M. tuberc. (Bul))

IVANOV, I. D.

USSR/Biochemistry

Card 1/1

Author   : Ivanov, I. D.

Title   : Arresting of mono-and poly-phenol oxidase activity by xanthogenates.

Periodical   : Dokl. AN SSSR, 95, 6, 1255 - 1258, 21 Apr 1954

Abstracts   : The article proves that xanthogenates (ethyl, butyl, isoamyl and benzyl) are very strong inhibitors for the activity of copper containing ferments.

Institution   : Republican Research Scientific Inst. Of Hematology and blood transfusion in Sophia, Bulgaria.

Submitted   : 22 Feb 1954

Ivanov I.D.

Inhibition of the catalytic activity with xanthogenes. I. D. Ivanov. Compt. rend. acad. bulgare sci. 7, No. 5, 41-4(1954)(English summary).—The inhibiting effect of xanthogenes on the catalytic activity of the blood is expressed in a $10^{-3}M$ concn. Here, branched chain xanthogenes inhibit the catalytic effect less than straight-chain xanthogenes. Xanthogenes barely exceed the deterrent action of well-known inhibitors for Fe-contg. enzymes. The inhibiting effect on the catalytic activity is considerably weaker than that on Cu-contg. enzymes. Joyce Lund

IVANOV, I. D.

Planning and mortising; a textbook. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit.
lit-ry, 1949. 165 p. (51-15491)

TJ1205.I 9 1949

IVANOV, I.D.

Speeding up technical progress at local industrial enterprises. Gor. khoz.Mosk. 33 no.9:1-4 S '59.

(MIRA 12:11)

1. Zamestitel' predsedatatelya Gorodskoy planovoy komissii.
(Moscow—Factories—Equipment and supplies)
(Automation)

SOLOMONOV, A.A., dotsent, kand. tekhn. nauk; IVANOV, I.D., starshiy
prepodavatel'

Adjusting geodetic nets by means of nodal points and polygons.
Izv. vys. ucheb. zav.; geod. i aerof. no.3:33-40 '64.

(MIRA 18:3)

1. Belorusskaya sel'skokhozyaystvennaya akademiya (for Solomonov).
2. Moskovskiy institut inzhenerov zemleustroystva (for Ivanov).

IVANOV, I.D.

Effect of xanthogenates on amylase activity of malt [with summary
in English]. Biokhimiia 22 no.6:991-993 N-D '57.   (MIRA 11:2)

1. Institut vinodeliya i pivovarennoy pormyshlennosti, Soviya,
Bolgariya.
            (SULFHYDRYL COMPOUNDS, effects,
                on amylase in barley (Rus))
            (AMYLASE,
                barley, eff. of sulfhydryl cpds. (Rus))
            (GRAIN,
                barley, eff. of sulfhydryl cpds. on amylase (Rus))

COUNTRY   : USSR
CATEGORY   : Cultivated Plants. Potatoes. Vegetables.   M
                Cucurbits.
ABS. JOUR.   : RZhBiol., No. 3, 1959, No. 10950

AUTHOR   : Ivanov, I. D., Satarova, N. A.
INST.   : Institutes of Plant Biochemistry and Physiology, AS USSR
TITLE   : Breaking the Dormancy of Newly Harvested Potato Tubers
                with Xanthogenates.

ORIG. PUB.   : Fiziol. rasteniy, 1958, 5, No. 2, 188-190

ABSTRACT   : In 1956, at the Institutes of Plant Biochemistry and
                Physiology, AS USSR, there was conducted the treatment
                (one month after harvesting) of the varieties Lorkh,
                Berlikhingen and Epron with ethylenexanthogenate (EXG)
                for 2 hours in the concentration of 0.03-0.01. Prior to
                the treatment, the tubers were cut in half. Control was
                treatment with water or thiourea (TU). EXG accelerated
                the sprouting of the tubers and the growth of the plants.
                In the 1957 experiment the freshly harvested tubers of
                Epron variety were treated with EXG solution in the con-

CARD: 1/2

IVANOV, I.D.

Fulfill the plan for 1963. Gor.khoz.Mosk. 37 no.10:3-4 O '63.

1. Zamestitel' predsedatelya Moskovskoy gorodskoy planovoy komissii.

(MIRA 17:2)

IVANOV, Ivan Dmitriyevich, kand. ekon. nauk; ROVINSKAYA, Ye., red.; SELEZNEVA, R., mlad. red.; MOSKVINA, R., tekhn. red.

["Common Market" and the competition of the two systems]
"Obshchii rynok" i sorevnovanie dvukh sistem. Moskva, Sotsekgiz, 1963.   110 p.   (MIRA 17:1)
       (European Economic Community)
       (Competition, International)

KAPELINSKIY, Yu.N.; POLYANIN, D.V.; ZOTOV, G.M.; IVANOV, I.D.; SERGEYEV,
    Yu.A.; MENZHINSKIY, Ye.A.; KOSTYUKHIN, D.I.; DUDUKIN, A.N.;
    IVANOV, A.S.; FINOGENOV, V.P.; ZAKHMATOV, M.I.; SOLODKIN, R.G.;
    DUSHEN'KIN, V.N.; BOGDANOV, O.S.; SEROVA, L.V.; GONCHAROV, A.N.;
    LYUBSKIY, M.S.; PUCHIK, Ye.P. [deceased]; KAMENSKIY, N.N.;
    SABEL'NIKOV, L.V.; GERCHIKOVA, I.N.; FEDOROV, B.A.; KARAVAYEV,
    A.P.; KARPOV, L.N.; VARTUMYAN, E.L.; SHIPOV, Yu.P.; ROGOV, V.V.;
    BOGDANOV, I.I.; VLADIMIRSKIY, L.A.; LEBEDEV, B.I.; ANAN'YEV, P.G.;
    TRINICH, F.A.; GOLOVIN, Yu.M.; MATYUKHIN, I.S.; SEYFUL'MULYUKOV,
    A.M.; SHIL'DKRUT, V.A.; ALEKSEYEV, A.F.; BORISENKO, A.P.; CHURAKOV,
    V.P.; SHASTITKO, V.M.; GERUS, V.G.; ORLOV, N.V., red.; KAPELINSKIY,
    Yu.N., red.; GORYUNOV, V.P., red. V redaktirovanii prinimali
    uchastiye: BELOSHAPKIN, D.K., red.; GEORGIYEV, Ye.S., red.; KOSAREV,
    Ye.A., red.; PANKIN, M.S., red.; PICHUGIN, B.M., red.; SHKARENKOV,
    Yu.S., red.; MAKAROV, V., red.; BORISOVA, K., red.; CHEPELEVA, O.,
    tekhn.red.

[The economy of capitalistic countries in 1958] Ekonomika kapita-
listicheskikh stran v 1958 godu. Pod red. N.V.Orlova, IU.N.Kape-
linskogo, V.P.Goriunova. Moskva, Izd-vo sotsial'no-ekon.lit-ry,
1959. 609 p.   (MIRA 12:12)

1. Moscow. Nauchno-issledovatel'skiy kon"yunkturnyy institut.
        (Economic conditions)

24253   IVANOV, I. F. O nekotorykh zakonomernostyakh vallerovskoy degeneratsii.
Trudy Akad. med. nauk SSSR, T. III, 1949, s. 129-35.

SO: Letopis, No. 32, 1949.

USSR / Human and Animal Morphology, Normal and Pathological.   S
           General Problems.

Abs Jour   : Ref Zhur - Biol.., No 8, 1958, No 35901

Author   : Ivanov, I. F.
Inst   : Not given
Title   : The Means for the Further Development of the Neuron
             Theory.

Orig Pub   : V sb.: Probl. morfol. nervn. sistemy, L. Medgiz, 1956, 5-19

Abstract   : The outlook on the neuron theory (NT), as an antiquated
             and subject to change theory of continuity or the repre-
             sentation of the refractor curve as an anatomico-physiolo-
             gical unit, is criticized. Contemporary NT is the objec-
             tive reflection of the divergent development of the nervous
             system, the origination of various types of neurons and
             inter-neuronal relations, the differentiation of neuronal
             and glial elements. The origin of neurons of different

Card 1/2

3

IVANOV, I. P.

Agriculture

Planting trees and shrubs in the cities and district centers of the Karelo-Finnish S.S.R. Petrozavodsk, 1951.

9. **Monthly List of Russian Accessions**, Library of Congress,   October   1953. Unclassified.
2

9.6000

78150
SOV/108-15-3-13/17

AUTHOR: Ivanov, I. F.

TITLE: Measurement of Nonlinearity of Impulse Systems by
            Comparison

PERIODICAL: Radiotekhnika, 1960, Vol 15, Nr 3, pp 67-74 (USSR)

ABSTRACT: A method is explained of determining experimentally the
            nonlinearity of an impulse system, comparing its input and
            output signals. A block diagram of the metering arrangement
            and current curves are shown in Fig. 2. Here T_{oper} is
            time of operation. Generator 1 produces impulses shown
            on plot 2a. These impulses are modulated in the modulator
            2, and after having passed through the output attenuator
            3 they feed the investigated element 5 (see curve 2b).
            The output signal of the investigated element is applied
            to one of the inputs of the comparison circuit 7
            (see curve 2c), after having passed through the input
            amplifier and the impulse widening element 6. A signal
            from the second impulse widening element is applied to the

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Measurement of Nonlinearity of Impulse
Systems by Comparison

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SOV/108-15-3-13/17

other input of the comparison circuit. The voltage
envelope of this signal accurately simulates the
voltage envelope of the input signal into the investigate
element (see curve d), switch K_2 being closed. The im-
pulse widening elements placed in the inputs in the com-
parison circuit 7 compensate the time lag caused by the
investigated element. Maximum values of voltages
U_{2max} and U_{kmax} applied to the inputs of the comparison
circuit 7 are adjusted to be equal. In comparison cir-
cuit these two voltages are subtracted and their difference
after having passed the paraphase amplifier of the ver-
tical deflection (8) is applied to the plates of the
electron beam tube (10) (see curves e' and e"). The
plates of horizontal deflection are fed by the sweep
voltage taken from the impulse widening element and the
paraphase amplifier of the horizontal deflection (9)
(see curves f' and f"). Brightening impulses generated
by the auxiliary network 4 (see curve g) are applied
to the controlling electrode. 4 also generates the

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Measurement of Nonlinearity of Impulse   78150
Systems by Comparison   SOV/108-15-3-13/17

modulating voltage for 2 and the regulating voltages for
the signal widening elements 6 and 9. The result of
determining the impulse system nonlinearity is given in
visual form on the screen of the tube as shown in Fig. 3.
From the shape of the metering line the degree and the
form of nonlinearity may be determined. The circuits
basic equations are given. The accuracy of this method is
discussed in its following aspects: (a) effect of
nonlinearity of metering device; (b) phase and frequency
distortion introduced by the investigated arrangement;
(c) instability at time transfer coefficients of elements
of the metering device. In conclusion, the author says
that: (1) The determination of nonlinearities is made
using signals of the same type as the operating signals
of the system; (2) the error of the method is withing
3-7% of the metered quantity; (3) in order to have a
higher accuracy of this method, nonlinearities of elements
should not exceed 0.5-1%. Assistance of Candidate of Tech-
nical Sciences L. Yu. Blyumberg and Eng. B.F. Avyanovich
is acknowledged. There are 10 figures; and 2 Soviet references

Card 3/3

Measurement of Nonlinearity of Impulse
Systems by Comparison

78150
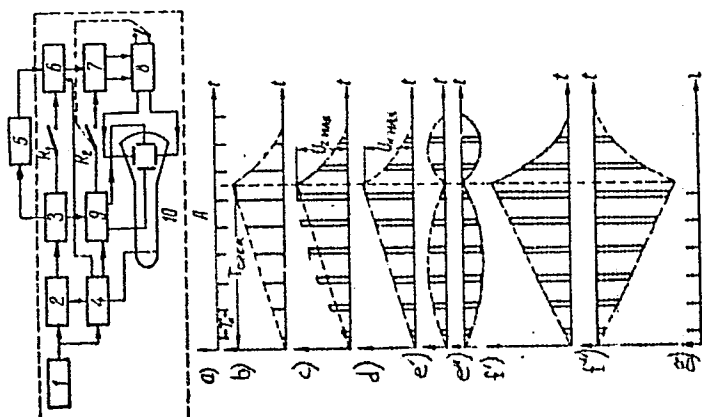SOV/108-15-3-13/17

Fig. 2

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S/108/63/018/002/007/010
D413/D308

AUTHORS: Ivanov, I. F. and Trofimov, V. S., Members of the
                Society (see Association)

TITLE: A universal method of measuring the nonlinearity of
                pulse-circuit equipment

PERIODICAL: Radiotekhnika, v. 18, no. 2, 1963, 52-60

TEXT: The authors survey the various methods used for measuring
nonlinearity in pulse circuits for television, radar and other
purposes, and consider the general requirements for such a method.
They examine three main nonlinearity criteria: η as used in tele-
vision, expressing the maximum deviation of the differential am-
plification factor from its intial value; ζ as used in radar, ex-
pressing the maximum relative deviation of the amplitude charac-
teristic from the tangent to it at the origin, and ξ, expressing
the maximum relative deviation of the characteristic from the line
joining its ends. They introduce a classification of amplitude
characteristics, work out the values of the various criteria for

Card 1/2

A universal method ...   S/108/63/018/002/007/010
                                          D413/D308

seven typical standard characteristics, and draw conclusions about
the advantages and disadvantages of the criteria. They consider a
universal method of measuring nonlinearity previously presented
by the first author (I. F. Ivanov, Radiotekhnika, v. 15, no. 3,
1960), which uses a sawtooth-modulated pulse-train as input, auto-
matically compares output and input voltages, and presents the
nonlinearity function directly on a CRT display. It is shown that
this method is most suited to the purpose and has extensive further
applications in pulse-circuit design work. There are 5 figures and
2 tables.

ASSOCIATION: Nauchno-tekhnicheskoye obshchestvo radiotekhniki i
              elektrosvyazi im. A. S. Popova (Scientific and Tech-
              nical Society of Radio Engineering and Electrical
              Communications imeni A. S. Popov) /Abstracter's
              note: Name of Association taken from first page of
              journal_7

SUBMITTED: June 3, 1961 (initially)
              November 14, 1961 (after revision)

Card 2/2

IVANOV, I. F.

IVANOV, Ivan Filippovich, prof.; SOLOVEY, A.S., red.; BALLOD, A.I., tekhn. red.; FEDOTOVA, A.F., tekhn.red.

[General histology with elements of the embryology of domestic animals] Obshchaia gistologiia s osnovami embriologii domashnikh zhivotnykh.   Moskva, Gos.izd-vo sel'khoz. lit-ry, 1957. 328 p.
        (Histology)
        (Veterinary embryology)   (MIRA 11:3)

USSR/Human and Animal Physiology. Digestion.

T

Abs Jour: Ref Zhur-Biol., No 8, 1958, 36583.

Author : Ivanov, I.F.
Inst   : Kazansk State Veterinary Institute.
Title   : The Problem of the Metabolic Gradiant of the Bowel.

Orig Pub: Uch.zap. Kazansk. gos. vet. in-ta, 1956, 64, No 1, 149-154.

Abstract: In mice, rabbits, rats and puppies the blood vessels
          were washed through the thoracic aorta and then per-
          fused for 10 min. with a solution of green janus B
          (dye) (1;1:1000). The stomach and bowel together
          with ligaments and mesentery were operatively removed
          under Ringer solution (37-38° C) and were left in that
          solution. The possibility of indirect contact of the
          stained organs with air O_2 was excluded. The initial
          staining of the stomach and bowel with blue or blue green

Card   : 1/3

          sic acid (1:000) for a portion ─ ─ ─
          reduction of I was not observed. There is not con-
          tinuous gradation of the intensity of metabolism
          process in the aboral direction in the gastro-intes-

Card   : 2/3

USSR/Human and Animal Physiology. Digestion.

Abs Jour: Ref Zhur-Biol., No 8, 1958, 36583.

T

tinal tract, but there exist areas of higher and
lower metabolism.

Card   : 3/3

IVANOV, I.F.

F. Kiss' new book and antineuronism ("Stephan von Apathy" by F. Kiss. Reviewed by I.F. Ivanov). Arkh. anat. gist. i embr. 36 no.5:105-108 My '59.
(MIRA 12:7)

1. Kuz'minki, Ukhtomskogo r-na, Moskv.obl., Veterinarnaya akdemiya, d.7, kv.4)

(NERVOUS SYSTEM) (KISS, F.)

IVANOV, I.F. (Moskva)

Contemporary status of the problem of the division of differentiated
neurons. Arkh. anat. gist i embr. 38 no. 6:89-104 Je '60.

(MIRA 13:12)

1. Adres avtora: Kus'minki, Lyuberetskiy rayon Moskovskoy oblasti,
Veterinarnaya akademiya, 10, kv. 9.
(NERVES)

IVANOV, I.F. (Moskva)

"Quantitative histology" of wallerian degeneration. Arkh.anat. gist.
i embr. 40 no.3:3-15 Mr '61.   (MIRA 14:5)

1. Moscow Veterinary Academy of Agricultural Animals. Adres avtora:
Kus'minki, Moskovskoy oblasti, Lyuberetskogo rayona, Veterinarnaya
akademiya, 10, kv.9.
                    (NERVOUS SYSTEM—DISEASES)

IVANOV, Ivan Filippovich, prof.; KOVAL'SKIY, Pavel Alekseyevich, prof.;
    BYRDINA, A.S., red.; DEYEVA, V.M., tekhn. red.

    [Histology and the principles of embryology of domestic
    animals] Gistologiia s osnovami embriologii domashnikh zhi-
    votnykh. Moskva, Sel'khozizdat, 1962. 678 p.   (MIRA 16:6)
            (Histology)   (Veterinary embryology)

IVANOV, I.F.   (Moskva); RADOSTINA, T.N.   (Moskva)

Vegetative periphery, its structure and reactive properties.
Arkh. anat. gist. i embr. 45 no.9:103-121 S'63   (MIRA 17:3)

1. Adres avtorov; Moskva, Zh-378, Veterinarnaya akademiya,
10, kvartira 9.

IVANOV I.F.

Experience in roof control at the "Dolzhanskaia-IUzhnaia" mine.
Ugol' 40 no.9:23-24 S '65.   (MIRA 18:10)

1. Pomoshchnik glavnogo inzhenera po proizvodstvu shakhtoupravleniya
"Dolzhanskcye-Yuzhnoye" tresta Sverdlovugol'.

KOZLOV, L.I.; IVANOV, I.G. (Moskva)

Hearing in riveters.   .   i prof.zab.   no.11:35-38 '61.
(MIRA 14:11)

1. Institut gigiyeny truda i profzabolevaniy AMN SSSR.
(DEAFNESS)   (RIVETS AND RIVETING--HYGIENIC ASPECTS)

IVANOV, I.G. (Moskva)

Cause of impaired hearing among certain groups of miners. Gig.
truda i prof.zab 2 no.3:38-42 My-Je'58   (MIRA 11:6)

1. Institut gigiyeny truda i profzabolevaniy AMN SSSR.
      (HEARING)
      (MINERS--DISEASES AND HYGIENE)

BULGARIA / Farm Animals. Cattle.   Q

Abs Jour   : Ref Zhur - Biologiya, No 2, 1959, No. 7375

Author   : Ivanov, Ivan G.
Inst   : Not given
Title   : The Antibiotic Characterisitc of Lactobacilli
             and Their Utilization in the Dairy Industry

Orig Pub   : Priroda (B"lg.), 1956, 5, No 6, 42-45

Abstract   : No abstract given

Card 1/1

55

BULGARIA/Chemical Technology. Chemical Products and Their   H
         Application. Food Industry.

Abs Jour: Ref Zhur-Khim., No 13, 1958, 44977.

Author : Ivanov Ivan G.
Inst   : ————————
Title   : Swelling of Brynza [Cheese] Caused by Butyric Acid
         Bacteria and Its Control.

Orig Pub: Zhivotnovedstvo i vet. delo, 1956, 10, No 5, 36-38.

Abstract: During a rainy period in early spring, when milk is
         strongly contaminated with particles of soil (con-
         taining a huge amount of butyric acid bacteria),
         brynza was prepared from pasteurized (62°, 20 mi-
         nutes) milk (under conditions excluding any addi-
         tional infection). Five of the 9 samples underwent

Card   : 1/3

BULGARIA/Chemical Technology. Chemical Products and Their   H
            Application. Food Industry.

Abs Jour: Ref Zhur-Khim., No 13, 1958, 44977.

            strong swelling with slight change in taste,
            and contained on the 40th day from 6000-22000
            butyric acid bacteria per 1 g of brynza, while
            the other samples contained 7000-12000. Bacteria
            isolated from these samples caused strong swelling
            of brynza. Partial or complete suppression of the
            activity of these bacteria was attained on using
            for the production of brynza an inoculum made from
            sour milk having antibiotic properties and pre-
            pared by the method of Dimov; the boiled (on a
            water bath) milk is inoculated with sound sour
            milk and allowed to curdle at 50-52°. This milk
            is used to inoculate milk which has been boiled

Card   : 2/3

                        39

IVANOV, I.G.

Infinity and eternity of the universe. Nauka i zhizn' 23 no.10: 39-42 O '56.

(Cosmogony)

(MLRA 9:11)

PA 24T1

IVANOV, I. G.

USSR/Chemistry - Phosphorus   Aug 1947
   Phosphorus

"Distilling Phosphorus from Phosphorus-bearing Silts
with Superheated Water Vapor," I. G. Ivanov, Chief
of the Central Factory Laboratory, 2 pp

"Khimicheskaya Promyshlennost" No 8

Gives table of operating data and schematic diagrams
of equipment. Concludes that there is a good possi-
bility of carrying out the proposed process on a
continuous basis, using a design for the distiller
with a worm feeder and a worm discharge for the
processed silt.

24T1

ACCESSION NR: AT4013975   S/3070/63/000/000/0003/0006

AUTHOR: Pines, B. Ya.; Ivanov, I. G.

TITLE: A vacuum installation for measuring rate of creep and rupture strength
of metals and alloys at temperatures up to 1200C

SOURCE: Novy*ye mashiny*i pribory* dlya ispy*taniya metallov. Sbornik statey.
Moscow, Metallurgizdat, 1963, 3-6

TOPIC TAGS: creep rate, rupture strength, creep tester, serial creep tester,
high temperature creep, high temperature rupture strength, rupture strength
measurement

ABSTRACT: The authors describe equipment they designed and have used since 1959
(see Fig. 1 in the Enclosure) to test five specimens simultaneously. Temperature
can be maintained constant within 2-3C over a range up to 1000C and within 3-5C
for temperatures above 1000C. Typical results of creep tests on copper or copper
alloy specimens are illustrated (see Fig. 2 in the Enclosure). The equipment is
intended to measure changes in elongation occurring over a period of time under
a constant load.   Well defined values can be obtained for the rate of creep.
Rupture strength for a given load is also plotted on the resulting diagrams.

Card   1/6̷2̸

ACCESSION NR: AT4013975

Low accuracy in deformation measurements is the stated shortcoming of the installation. Orig. art. has: 2 graphs.

ASSOCIATION: Khar'kovskiy gosudarstvenny*y universitet im. A. M. Gor'kogo (Khar'kov State University)

SUBMITTED: 00   DATE ACQ: 20Feb64   ENCL: 04

SUB CODE: ML, SD   / NO REF SOV: 003   OTHER: 000

Card   2/8

Ivanov, I. G.

81890
S/181/60/002/05/29/041
B004/B056

_18.8200_

AUTHORS: Pines, B. Ya., Ivanov, I. G.

TITLE: The "Aftereffect" in Metal Samples Which Had Been
             Exposed to Diffusion Creep at High Temperatures

PERIODICAL: Fizika tverdogo tela, 1960, Vol. 2, No. 5, pp. 959 - 966

TEXT: The authors carried out experiments with samples made from cast
copper or copper cermets (grain size < 50 μ). The samples were heated
to temperatures of from 850 to 1070°C and exposed to a stress of from
30-50 g/mm^2. The deformation after removal of the stress was measured.
Experimental data for different temperatures, samples, and stresses are
given in Figs. 1-6. An aftereffect, a deformation with reversed sign,
was observed as soon as the stress was removed. At constant temperature
the ratio between the amount π of the aftereffect and the creep rate v
does not depend on the applied stress. With increasing temperature π
becomes small and tends towards zero at the melting-point. At constant v
the same temperature dependence exists for π as for that stress which

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The "Aftereffect" in Metal Samples Which Had   81890
Been Exposed to Diffusion Creep at High   S/181/60/002/05/29/041
Temperatures   B004/B056

is necessary for realizing the given v. In the case of samples that are not in equilibrium, π decreases with decreasing v at constant stress and temperature. Besides on v, π depends on the creep deformation ε. In the case of a slight deformation, π/ε tends toward unity. With increasing deformation π/ε at first decreases quickly, and later slowly, and becomes nearly constant by strong deformation. The phenomena observed are explained by micro-nonhomogeneities of the polycrystalline samples, which are caused by the diffusion creep. In the crystal, germs of new "atomic faces" are formed by creep, which gradually lead to an irreversible extension of the sample. There are 6 figures and 4 Soviet references.

ASSOCIATION: Khar'kovskiy universitet (Khar'kov University)

SUBMITTED: June 23, 1959

Card 2/2

S/181/62/004/007/020/037
B102/B104

AUTHORS: Pines, B. Ya., Ivanov, I. G., and Smushkov, I. V.

TITLE: The partial diffusion coefficients and the self-diffusion
              coefficients of alloys of the copper-nickel system

PERIODICAL: Fizika tverdogo tela, v. 4, no. 7, 1962, 1882-1890

TEXT: The values of the experimentally determined heterodiffusion
coefficients (Pines, Smushkov, FTT, 1, 6, 939, 1959) and the calculated
ratios of the partial diffusion coefficients are used to determine the
partial diffusion coefficients of Ni and Cu in dependence on the concentra-
tion of the components at 1000, 900, 800, and 700°C. $D_{al}^{sd} = c_A D_A + c_B D_B$ and
$D_{al}^{hd} = c_B D_A + c_A D_B$; D_{al}^{sd} and D_{al}^{hd} are the self- and heterodiffusion coefficients
of the alloy, $c_{A,B}$ and $D_{A,B}$ are the atomic concentrations and the partial
diffusion coefficients of the components. The partial diffusion
coefficients obtained are used to calculate the self-diffusion coefficients
of Cu-Ni alloys as dependent on the concentration. The calculations are

Card 1/8

carried out in regular-solution approximation (Pines, ZhTF, 24, 6, 1521, 1954), where $D_A^{al} = D_A' + L_A$; ξ is the vacancy concentration in the alloy of given concentration, L_A a thermodynamic factor

$$L_A = 1 - \frac{2z U_0 c_B(1-c_B)}{kT} \quad , \quad D_A' = \frac{\delta^2}{6\tau} \exp\left[\left(W_A - G_A\right)/kT\right];$$

U_0 is the displacement energy, z the coordination number in the alloy lattice, δ the interatomic distance, τ the shortest lattice vibration period, G_A the change in potential energy of the alloy when an A atom is displaced "to infinity", W_A is the same when the atom is brought from infinity to the "potential barrier vertex". An atom located at this vertex has the coordination number z' so that $G_A - W_A = -(z-z')\left[c_B U_{AB} + (1-c_B)U_{AA}\right]$, where $U_{AB,AA}$ are the mutual potential energies. $\xi = \exp(-\Delta F_0/2kT)$, ΔF_0 is the change in free energy,

$$\Delta F_0 = -(z-z')\left[(1-c_B)^2 U_{AA} + c_B^2 U_{BB} + 2c_B(1-c_B)U_{AB}\right]. \quad (5a)$$

Card 2/4

The partial diffusion coefficients...   S/181/62/004/007/020/037
B102/B104 .

z" is the effective coordination number of an alloy atom situated between two lattice nodes. The self-diffusion coefficients are obtained from

$$D_{Cu}^{Cu} = M \exp \frac{1}{kT} \left[\frac{z-z''}{2} + z - z' \right] U_{CuCu};$$

$$D_{Cu}^{Ni} = M \exp \frac{1}{kT} \left[\frac{z-z''}{2} U_{NiNi} + (z-z') \right] U_{CuNi};$$

$$D_{Ni}^{Cu} = M \exp \frac{1}{kT} \left[\frac{z-z''}{2} U_{CuCu} + (z-z') \right] U_{CuNi};$$

$$D_{Ni}^{Ni} = M \exp \frac{1}{kT} \left[\frac{z-z''}{2} + z - z' \right] U_{NiNi},$$

(9)

$$\mu = \frac{D_{Ni}^{Cu}}{D_{Cu}^{Ni}} = \exp \frac{z-z''}{z} \frac{1}{kT} (q'_{Ni} - q'_{Cu});$$

$$\nu = \frac{D_{Cu}^{Cu}}{D_{Ni}^{Ni}} = \exp \frac{1}{kT} \frac{z-z''+2(z-z')}{z} (q'_{Ni} - q'_{Cu});$$

$$\frac{\nu}{\mu} = \exp \frac{2(z-z')}{z} \frac{1}{kT} (q'_{Ni} - q'_{Cu}),$$

(9a)

Card 3/8

The partial diffusion coefficients...   S/181/62/004/007/020/037
                                             B102/B104

where $q'_{Ni} - q'_{Cu}$ is the difference of the latent evaporation heats per atom,
$N(q'_{Ni} - q'_{Cu}) = q_{Ni} - q_{Cu} \approx 15-16$ kcal/g-at, $(z-z'')/2 = 2.38$, $z-z' = 1.62$.
$zU_o \approx 2.6 \cdot 10^{-13}$ erg/part. There are 4 figures.

ASSOCIATION: Khar'kovskiy gosudarstvennyy universitet im. A. M. Gor'kogo
             (Khar'kov State University imeni A. M. Gor'kiy)

SUBMITTED: February 22, 1962

Fig. 3. Self-diffusion coefficients as dependent on the Ni concentration (at %).
1, 1', 1", 1''' - experimental curves, 2, 2', 2", 2''' calculated (equilibrium)
curves.

Fig. 4. Experimental (1 and 3) and calculated (2 and 4) equilibrium
partial diffusion coefficients (D_{Cu}^{al} and D_{Ni}^{al}) as dependent on the Ni concen-
tration.

Card 4/8

P 1250

P. 8200

S/181/62/004/006/013/041
B125/B102

AUTHORS: Pines, B. Ya., and Ivanov, I. G.

TITLE: Mechanical properties of copper - nickel alloys at increased temperatures

PERIODICAL: Fizika tverdogo tela, v. 4, no. 6, 1962, 2109-2115

TEXT: The time τ that copper - nickel alloys can resist stresses of 400 to 1100 g/mm^2 increases with the nickel concentration (from 0 to 30 at% Ni), at first rapidly and then more slowly. At 85 to 90% it has a small peak. Perhaps the mechanism of deformation and fracture at these concentrations is different. With decreasing temperature the curves for the concentration dependence of $\log\tau$ and $\log V$ shift almost parallel to higher values of $\log\tau(V)$. The concentration dependence of $\log(V\tau)$ (V being the rate of creep) is almost a mirror image of the concentration dependence of $\log\tau$. The concentration dependence of V and τ is mainly caused by the concentration dependence of the self-diffusion coefficient D. If the nickel concentration increases from 0 to 80% then $\log(V/D)$ decreases slightly and $\log(\tau D)$ increases slightly. At $\sim$93% Ni, $\log(V/D)$ has a

Card 1/2

Mechanical properties of ...   S/181/62/004/008/013/041
                                                B125/B102

rather flat minimum and $\log(\tau D)$ has a rather flat maximum. In first approximation $\log(V\tau)$ is independent of the temperature, the voltage applied, and the nickel concentration. $V \sim D\ p^n$ and $\tau \sim (D\ p^n)^{-1}$ with $n \sim 4.0$ but $\tau \sim ((kT)^2/p^3)e^{(U_o - qp)/kT}$. If the alloy surface is not protected from evaporation then τ is smaller and V is greater. These changes become clearly apparent at temperatures of about $800^\circ C$ and are less distinct at $1050^\circ C$; they are more distinct in alloys rich in nickel than in alloys poor in nickel. There are 5 figures.

ASSOCIATION: Khar'kovskiy gosudarstvennyy universitet im. A. M. Gor'kogo
              (Khar'kov State University imeni A. M. Gor'kiy)

SUBMITTED: March 16, 1962

Card 2/2

L 11419-63   EWF(q)/EWT(m)/BDS   AFFTC/ASD   JD
S/032/63/029/005/011/022

AUTHORS: Pines, B. Ya. and Ivanov, I. G.

TITLE: Preparing monocrystals of Ni, Cu and Cu-Ni alloys in a vacuum smelting furnace

PERIODICAL: Zavodskaya laboratoriya, v. 29, no. 5, 1963, 588-589

TEXT: A simple method of forming monocrystals of difficultly-fusible metals, nickel, copper and nickel-copper alloys directly from fusions has been worked out. The molten alloy, in a crucible, is driven up into a zirconium test tube by nitrogen at a pressure of 1 atmosphere. The temperature is lowered to several degrees below the solidification point of the alloy and kept there under vacuum for 1 hour. Then it is slowly cooled. Monocrystals up to 100 mm in length and 3-5 mm in diam. have been obtained. There are 2 figures.

ASSOCIATION: Khar'kovskiy gosudarstvennyy universitet im. A. M. Gor'kogo
(Khar'kov State University imeni A. M. Gor'kiy)

ja/CR
Card 1/1

IVANOV, I.I.

Electrification is a powerful factor in the increase of labor
productivity. Zhel.dor.transp. 46 no.3:12-18 Mr '64.
(MIRA 17:3)

1. Glavnyy inzh. Glavnogo upravleniya elektrifikatsii i
energeticheskogo khozyaystva Ministerstva putey soobshcheniya.

IVANOV,I.I., inzhener.

Hydraulic excavators Model 504 built by the firm "Denag." Mekh.stroi.
13 no.12:27-29 D'56.   (MIRA 10:1)
                    (Excavating machinery)

IVANOV, I.I., inzhener.

Tower crane with a hoisting arm and balancing tackle. Mekh. stroi. 14
no.2:29-30 F '57.   (MIRA 10:4)
                    (Cranes, Derricks, etc.)

SOKOLOV, L.S.; IVANOV, I.I.; SHLYCHKOVA, N.S.; YANCHUK, A., red.;
LIL'YE, A., tekhn.red.

[Brief review of the subways of the world]Kratkii obzor me-
tropolitenov mira. Moskva, 1958. 115 p.   (MIRA 15:11)

1. Nauchno-tekhnicheskoye obshchestvo moskovskogo metropolitena
im. V.I.Lenina. 2. Tekhnicheskiy otdel moskovskogo metropolitena
im. V.I.Lenina (for Sokolov, Ivanov, Shlychkova).
                        (Subways)

YAKERSON, Matvey Semenovich; TSYBUL'SKIY, Vladimir Abramovich. Prinimali
uchastiye: LABUDIN, I.A.; FEDOROV, Ye.L.; KELLO, I.O.; CHIZHEVSKIY,
A.L.; POLENOV, A.N.; NIKITIN, M.N.; IVANOV, I.I.; GEYET, N.Y.;
FEDOROV, Ye.Y.; FEDOSOV, M.G.   YEGOROVA, K.I., red.; ONOSHKO,
N.G.,tekhn.red.

[The "Znamia Truda" Factory; a brief account of the "Znamia Truda"
Armature Factory in Leningrad] Znamia truda; kratkii ocherk isto-
rii leningradskogo armaturnogo zavoda "Znamia truda." 1960.   207 p.
                                                (MIRA 14:4)

        (Leningrad--Factories)

IVANOV, I.I.; POVSTYANOY, M.F.

Mechanization of accounting. Koks i khim. no.5:63 '63. (MIRA 16:5)
(Zaporozh'ye--Coke industry--Accounting) (Machine accounting)

BOLOTOV, V.V. (Leningrad); RAVDONIK, V.S. (Leningrad); IVANOV, I.I.
(Leningrad); CHERVONENKIS, Ya.M., kand.tekhn.nauk (Moskva)

Transmission of electric power at long distances. Prospects of
stepping-up the voltages of overhead power transmission lines.
Elektrichestvo no.9:77-80 S '63.   (MIRA 16:10)

PA 4977

IVANOV I. I.

Jan 1947

USSR/Engineering
    Fuels, Diesel
    Fuel Conservation

"Methods of Rationalizing the Fuel Consumption at
Power Stations," I. I. Ivanov, Ministry Transp, 10 pp

"Energeticheskiy Byull" No 1

States that to make any sort of rationalization in
fuel expenditure, necessary to determine the techno-
logical norms. Any increase should be based on com-
bined norm of the technological norms. Presents
formulas to calculate the norms for individual station
having one Diesel unit operating, and later discusses
determination of formulas for case where two, three,
or more Diesel units operate at one station.   4977

LC

PA 16T82

IVANCV, I. I.

Apr 1947

USSR/Engines, Diesel
    Diesel cycle

"The Use of Diesels During Peak Loads," I. I.
Ivanov, 10 pp

"Energeticheskiy Byulleten'" No 4

Largely mathematical discussion with graphs of
operating data and formulae.

16T82

PA 58T30

IVANOV, I. I.

USSR/Engineering   Jul 1947
    Fuel - Conservation
    Efficiency, Industrial

"Fuel Economy Through Combining the Processing of
Thermal and Electrical Energy," I. I. Ivanov, Min-
PuteySoobshcheniya, 6½ pp

"Energeticheskiy Byulleten'" No 7

Shows relationship between degree of fuel economy,
realized in a combined installation, and structure of
energy utilization. This can be characterized by
relationship between utilization of thermal or elec-
trical energy.

                                                   58T50

IVANOV, I. I.   Jan 48
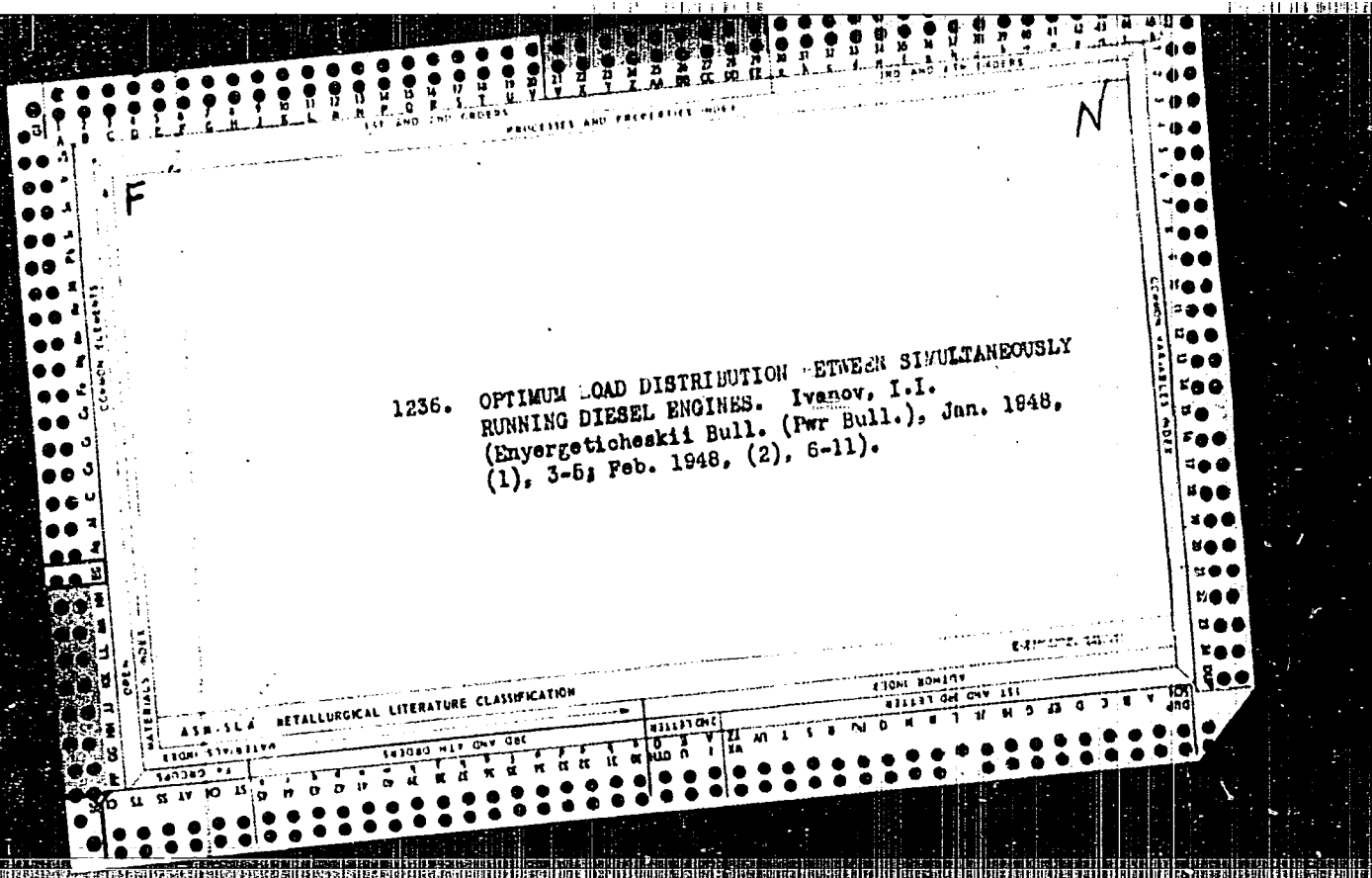
USSR/Engineering
     Railroads, Electric
     Power Transmission, Electric

"On S. M. Serdinov's Article,   'The Problem of Long-Distance Power Supply for
Electrical Railroads'" 3 pp

"Elektrichestvo" No 1

Problems presented in original article is of great importance. Here suggestions
are offered by M. A. Shatelen, Corr Mem, Acad Sci; Prof V. V. Bolotov, Leningrad
Polytech Inst imeni Kalinin; I. I. Ivanov, Cand Tech Sci, Cen Sec, Power Eng Econ,
Ministry of Means of Communication USSR; L. O. Gruber, Engr, Transtekhproyekt, Ministry
of Means of Communication USSR; A. N. Sarkisov, Engr, Baku.

PA 4/49 149

1236. OPTIMUM LOAD DISTRIBUTION BETWEEN SIMULTANEOUSLY RUNNING DIESEL ENGINES. Ivanov, I.I. (Enyergeticheskii Bull. (Pwr Bull.), Jan. 1948, (1), 3-6; Feb. 1948, (2), 6-11).

PA 2/49T15

IVANOV, I. I.

USSR/Electricity
    Power Plants, Diesel Electric
    Efficiency, Industrial

Jun 48

"Effect of the Coefficient of Consumption of a
Plant on the Cost of Electric Power," I. I.
Ivanov, Minister of Means of Communications, 7 pp

"Energet Byul" No 6

An economic principle states that the greater out-
put of a power plant and correspondingly greater
coefficient of utilization will decrease the over-
all cost of power. Discusses structure of these
power-economical characteristics on basis of data
obtained from operation of Diesel power stations.
LC   2/49T15

USSR/Engineering   Aug 48
    . Meters, Power
    Electricity - Conservation

"Methods for Rationalization of Specific Electric
Power Consumption," I. I. Ivanov, Cand Tech Sci,
5¼ pp

"Prom Energet" No 8

Discusses methods of evaluating electric power ex-
pended at various stages in manufacturing processes.

6/49T51

IVANOV, I.

PA 65/49T40

USSR/Electricity - Efficiency, Industrial
Electric Power Consumption

Jul 49

"Conference on Rationalization of Electric-Power Consumption and Economy of Electric Energy,"
I. Ivanov, 3 pp

"Energet Byul" No 7

A well-represented industrial-technical conference on these problems was held 20 - 24 May 49 in Leningrad. V. A. Burmistov's report concerned increased productivity and electric-power savings achieved by using rapid metalworking (cutting)

USSR/Electricity - Efficiency, Industrial (Contd)

Jul 49

machinery in his plant. A resolution was adopted recommending measures for further rationalization of electric power in industry.

65/49T40

IVANOV, I. I.

PA 161T36

USSR/Electricity - Power Economy, Elec-   Apr 50
                    tric
            Norms, Specific Power

"Problems Relating to Establishing Norms for
Specific Consumption of Electric Power in Mech-
anical Workshops," I. I. Ivanov, Cand Tech Sci,
3 3/4 pp

"Prom Energet" No 4

Describes method and gives formulas for estab-
lishing norm of electric power consumption per
standard machine-hour in metalworking industry.
Experimental data acquired can be used for

                                        161T36

USSR/Electricity - Power Economy, Electric   Apr 50
                    (Contd)

average load of electric motor in machine bank,
after certain corrections, to obtain norms for
level of power consumption and productivity of
work.

161T36

IVANOV, I. I.

USSR/Engineering - Volga-Don Canal
Societies

Oct 52

"A General Meeting of the Administration of
MONIIOE (Moscow Branch of the All-Union Scien-
tific and Technical Society of Power Engineers)
Devoted to the Opening of the Volga-Don Canal
imeni V. I. Lenin," I. I. Ivanov, Cand Tech Sci,
Sci Secy, MONIIOE

"Elektrichestvo" No 10, p 92

Speeches were given by Acad M. V. Kirpichev, Chm,
MONIIOE, I. I. Kandalov, Engr; Ya. N. Vetukhnovskiy,
Chief Engr of the Planning Office, Gidrostal'proyekt;
and M. M. Trekhov and A. S. Tikhomirov, engineers
of the Automobile Plant imeni Stalin.

231T35

231T35