

SOV-98-58-8-4/22

Technological News on the Concreting of Hydrotechnical Structures

struction between the GES (building and the dam). The above-mentioned method was applied and under winter conditions the construction rose 7.5 m in 40 days. Different brands of concrete were used: in the lower part, concrete M-250 was used, then - concrete M-100, and in the upper part - concrete M-150. The packing of the concrete was achieved by usual stem vibrators as the needed high frequency vibrators were not available. Concrete pouring was executed at a temperature of minus 16-20° C. All this showed the advantages of the proposed method.

There are 3 diagrams and 2 tables.

1. Power plants--Construction 2. Concrete--Applications

Card 2/2

14(10)

SOV/98-59-5-16/21

AUTHOR: Vasil'yev, A.F., Corresponding Member

TITLE: The Montgomery Dam

PERIODICAL: Gidrotekhnicheskoye stroitel'stvo, 1959, Nr 5,
46-48 (USSR)

ABSTRACT: The author describes the construction of the Montgomery Dam, USA, which he visited on 25 September 1958. He gives total costs of construction (2,663,910 dollars) and recommends Soviet Scientific Institutions study the material available in the USSR in respect to this construction. There are 4 drawings and 1 table.

ASSOCIATION: AS i A SSSR (Academy of Construction and Architecture, USSR)

Card 1/1

VASIL'YEV, A.F.

Warping of soil in foundations of pressure hydraulic structures.
Gidr.stroi. 30 no.2:30-33 F '60. (MIRA 13:5)

l. Chlen-korrespondent Akademii stroitel'stva i arkhitektury
SSSR.
(Hydraulic engineering)

VASIL'YEV, A.F.

New method of constructing cutoff curtains. Gidr. i stroi. 30
no.5:54-55 My '60. (MIRA 14:5)

1. Chlen-korrespondent Akademii stroitel'stva arkhitektury SSSR.
(Dams)

VASIL' YEV, A.F.

Damming of the Angara River at the Bratsk Hydroelectric
Power Station. Gidr. stroi. 30 no. 6:11-13 Je '60.
(MIRA 13:7)

1. Chlen-korrespondent Akademii stroitel'stva i arkhi-
tektury.
(Bratsk Hydroelectric Power Station--Barrages)

VASIL'YEV, A.P.

Construction of the Pirttikoski Hydroelectric Power Station
Gidr.stroi. 30 no.7:54-56 Jl '60. (MIRA 13:7)

1. Chlen-korrespondent Akademii stroitel'stva i arkhitektury
SSSR.
(Pirttikoski Hydroelectric Power Station)

VASIL'YEV, A.F.

Ways of reducing the cost of dams built of morainic materials.
Gidr. stroi. 30 no.9:4-5 S '60. (MIRA 13:9)

1. Chlen-korrespondent Akademii stroitel'sta i arkhitektury
SSSR.
(Dams)

VASILL'YEV, A.F.

Mechanical passage of timber through a hydraulic development.
Gidr. stroi. 32 no.8:51-52 Ag '62. (MIRA 15:9)

1. Chlen-korrespondent Akademii stroitel'stva i arkhitektury
SSSR.
(Finland—Lumber—Transportation)
(Finland—Hydroelectric power stations)

VASIL'YEV, A.P., inzh.; PAVLOV, A.P., inzh.

Erection of an earthfill dam at the upper Tuloma River hydroelectric development. Energ. stroi. no. I:42-51 '65. (MIRA 18:7)

This handle serves as a lever for the valve. The latter allows the flow of the contacting liquid to the surface of the blades.

This handle serves as a lever for the valve. The latter allows the flow of the contacting liquid to the surface of the blades.

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858820005-4

to pressure valve; in lead

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858820005-4"

TIBANOV, F.V.; VASIL'YEV, A.F.; KOGAN, I.M.; BURMAKIN, N.M.

Quantitative analysis of products of exhaustive chlorination of pentanes
based on infrared spectra. Zav. lab. 31 no.2:172-176 '65. (MIRA 18:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh sredstv
zashchity rasteniy.

5 (3)
AUTHORS:

SOV/79-29-3-5/61
Nazarov, I. N. (Deceased), Gurvich, I. A., Aleksandrova, G. V.
Kuznetsov, N. V., Vasil'yev, A. F.

TITLE:

Stereochemistry of the Synthesis of Acetylene With Bicyclic Ketones (Stereokhimiya atsetilenovogo sinteza c bitsiklicheskimi ketonami). Synthesis of Cis-1-ethynyl-1-oxy-6-decalone. Absorption Spectra of the Series of Tert. α -decalols (Sintez tsis-1-etinil-1-oksi-6-dekalona. Spektry pogloshcheniya ryada tretichnykh α -dekalolov)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 3, pp 753-761 (USSR)

ABSTRACT:

Proceeding from the experience acquired in their earlier experiments (Refs 1-3) the authors interpreted the configuration of the substituents at the C in the alcohol (I) and in the product of its hydration (II) on the basis of the reactivity of these substituents. In the work under review the condensation of cis-methoxyoctalone (III) with sodium acetylenide was carried out in liquid ammonia and after saponification of the reaction product acetylene alcohol (IV) was obtained as chief product, besides small quantities of isomeric acetylene alcohols (IVa and IVb). Compound (IV) in methanol in the presence of sulphuric mercury smoothly hydrates into decalone(V),

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SOV/79-29-3-5/61

Stereochemistry of the Synthesis of Acetylene With Bicyclic Ketones.
Synthesis of Cis-1-ethynyl-1-oxy-6-decalone. Absorption Spectra of the
Series of Tert. α -decalols

which easily forms bis-2,4-dinitrophenyl hydrazone. On the basis of the latter two easy reactions it must be assumed that both compounds have the same spatial arrangement of the side chain and of hydroxyl at the C₁, like cis-ethynyl decalol (I) and the corresponding acetyl derivative (II). In hydrogenation, compound (IV) yields ethyl decalone (VI) in crystals, which by reduction yields diol (VII) (Scheme 2). In the reaction with (III) and subsequent saponification, ethyl magnesium bromide yields an oil, which by reduction forms ethyl diol (VII). In the reaction of ethyl magnesium iodide with (VIII) an oil is formed, which in reduction forms the isomeric diol (X). (X) yields in its oxidation the isomeric ketol (IX) of (X). (X) yields keto alcohol (VI) is a cis-decalin derivative, so that also acetylene alcohol (IV) and its derivatives belong to this series. Keto alcohol (IX) and diol (X) are thus derivatives of transdecalin. Several substituted cis- and trans- α -decalols were obtained. The absorption spectra of several tertiary α -decalols are shown. It may be seen from

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SOV/79-29-3-5/61

Stereochemistry of the Synthesis of Acetylene With Bicyclic Ketones.
Synthesis of Cis-1-ethynyl-1-oxy-6-decalone. Absorption Spectra of the
Series of Tert. α -decalols

them that cis-ethynyl- α -decalols synthesized in the same way
possess the same chemical properties and the same absorption
spectra. There are 3 figures and 12 references, 6 of which
are Soviet.

ASSOCIATION: Institut organicheskoy khimii Akademii nauk SSSR
(Institute of Organic Chemistry of the Academy of Sciences,
USSR)

SUBMITTED: January 4, 1958

Card 3/3

5 (3,4)

SOV/79-29-3-6/61

AUTHORS: Nazarov, I. N. (Deceased), Vasil'yev, A. F., Gurvich, I. A.

TITLE: Infrared Absorption Spectra of the Substituted Trans-1,6-decalindiols and Δ^5 -1,6-Octalindiol (Infrakrasnyye spektry pogloshcheniya zameshchennykh trans-1,6-dekalindiolov i Δ^5 -1,6-oktalindiolov)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 3, pp 761-767 (USSR)

ABSTRACT: The present paper deals with the absorption spectra of 1-substituted trans-9-methyl-1,6-decalindiols (I, II, III) (Fig. 1 (1-3)), 9-methyl- Δ^5 -1,6-octalindiol (X, XI, XII) (Fig. 2 (10-12)) and their 6-monacetates (IV, V, VI, XIII, XIV, XV) (Fig. 1 (4-6) and Fig. 2 (13-15)), as well as the absorption spectra of the initial keto alcohols (VII-IX, XVI-XVIII) (Fig. 1 (7-9) and Fig. 2 (16-18)) which do not contain any secondary alcohol group recorded in the spectrum range 900-1500 cm^{-1} . All these compounds (I-XVIII) being tertiary α -decalols have the same configuration as the substituents at the C₁, since they all originate from the acetylene alcohol (XVIII). The diols (I-III, X-XII) contain a secondary alcohol group having an equal spatial arrangement,

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Infrared Absorption Spectra of the Substituted Trans-1,6-decalindiols and
 Δ^5 -1,6-Octalindiols

as they are all transformed into one and the same diol (I) in the hydrogenation of the unsaturated alcohols (II, III, X-XII). Figure 1 shows the spectra of trans-9-methyl-decalin derivatives. In comparing the spectra a marked difference may be observed between those of the ketones, alcohols and acetates. Figure 2 shows the absorption spectra of 9-methyl- Δ^5 -octalin derivatives. These spectra give a general picture of those illustrated in figure 1. Thus, the absorption spectra of several substituted 1,6-decalindiols, Δ^5 -1,6-octalindiols, of their acetates and corresponding 6-keto alcohols in the spectrum range 900-1500 cm^{-1} were shown and described. By the aid of the absorption spectra of 1-ethyl-, 1-vinyl-, 1-ethynyl-substituted 9-methyl-1,6-decalindiols, of 9-methyl- Δ^5 -1,6-octalindiol and its derivatives, as well as by the aid of the spectra of their acetates it was shown that these compounds contain a secondary alcohol group having an equatorial orientation. There are 2 figures, 1 table, and 6 references, 4 of which are Soviet.

Card 2/3

sov/79-29-3-6/61

Infrared Absorption Spectra of the Substituted Trans-1,6-decalindiols and
 Δ^5 -1,6-Octalindiols

ASSOCIATION: Institut organicheskoy khimii Akademii nauk SSSR
(Institute of Organic Chemistry of the Academy of Sciences,
USSR)

SUBMITTED: January 4, 1958

Card 3/3

ZAV'YALOV, S.I.; GUNAR, V.I.; VASIL'YEV, A.F.

Direct hydroxylation of 2-substituted dihydroresorcinols. Izv.
AN SSSR Otd.khim.nauk no.5:938 My '60. (MIRA 13:6)

1. Institut organicheskoy khimii imeni N.D. Zelinskogo Akademii
nauk SSSR.
(Resorcinol) (Hydroxylation)

ZAV'YALOV, S.I.; VASIL'YEV, A.F.; VINOGRADOVA, L.P.

Chemistry of dihydroresorcinol. Report No.5: Reactions of cyclic
 β -dicarbonyl compounds with hydrogen peroxide in an alkaline medium.
Izv.AN SSSR.Otd.khim.nauk no.5:849-853 My '61. (MIRA 14:5)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.
(Resorcinol) (Hydrogen peroxide)

VASIL'YEV, A.F., Eng.

Electric Switchgear

Increasing operation reliability of switches. Elek. sta., 23, No. 6, 1952.

Monthly List of Russian Accessions, Library of Congress, October 1952. UNCLASSIFIED.

1. VASIL'YEV, A. F., ENG.
 2. USSR (600)
 4. Electric insulators and Insulation
 7. Maintenance of insulators of open distributive installations of a thermal electric power plant. Elek. sta. 23, no. 11, 1952.
9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001858820005-4

VASIL'IEV, A.I., inzhener.

Using self-synchronization in turbogenerators. Elek.sta. 24 no.4:58-60
Ap '53.
(MLRA 6:5)
(Dynamos)

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CIA-RDP86-00513R001858820005-4"

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001858820005-4

VASIL'YEV, A. F.

REPLY
STEREOTYPE TEXT STATION 1554, NO. 2-33 in
Russia
The system has been designed to correct the frequency of the power system. The system consists of two parts: a corrector and a frequency meter. The corrector is connected to the frequency meter and receives information from it. The corrector then sends signals to the power system to correct its frequency. The frequency meter also receives signals from the power system and displays the current frequency. The corrector can also be used for automatic control of system frequency.
J. LUKASZEWCZ

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001858820005-4"

VASIL'EV, A.F.

VASIL'EV, A.F., inzhener.

Introducing automatization in the generator room of a thermal
electric power plant. Elek. sta. 25 no.6:32-36 Je '54. (MLRA 7:7)
(Electric power plants)

AID P - 3767

Subject : USSR/Electricity

Card 1/1 Pub. 26 - 9/29

Author : Vasil'yev, A. F., Eng.

Title : About the possibility of omitting the installations of
field-adjusted synchronization

Periodical : Elek. sta., 10, 28-30, 0 1955

Abstract : The author discusses the problems of automatic synchronization and the possibility of eliminating from the installations the equipment which permits introducing field adjusted synchronization if needed. He concludes that when automatic synchronization is introduced, the equipment for field-adjusted synchronization should be dismounted. One detailed connection diagram.

Institution : None

Submitted : No date

I 22714-66 EWT(1)/FWA(h)

ACC NR: AP6002934

(A)

SOURCE CODE: UR/0286/65/000/024/0102/0102

AUTHORS: Vasil'yev, A. F.; Shibanov, G. P.

56

ORG: none

B

TITLE: A shaping circuit for the delay of pulsed signals. Class 42, No. 177160

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 24, 1965, 102

TOPIC TAGS: shaping device, pulse compression, pulse transformers, signal shaping, electronic shaping

ABSTRACT: This Author Certificate presents a shaping circuit for the delay of pulsed signals. The shaping circuit contains a blocking generator and uses a broad pulse transformer surge as the delayed signal. The design increases the duration and stability of the time delay and constricts the broad pulse of the transformer surge with the simultaneous increase of its amplitude. The load circuit of the blocking generator is divided into two parallel arms. One of the arms serves for shaping the signals of positive feedback, and the other serves for removing the effective signals. Each of the arms is made in the form of a separate pulse transformer.

SUB CODE: 09/ SUBM DATE: 09Dec61

Card 1/1

ULR

UDC: 681.142

VASIL'YEV, A.F.

Contours, integral and peak intensities of valence vibrations bands
of the P₂S bond. Izv. AN SSSR. Ser. fiz. 26 no.10:1278-1282 O '62.
(MIR 15:10)

(Phosphorodithioic acid—Spectra)
(Spectrum, Molecular)

VASIL'YEV, A. F.

Measuring the half-width of the instrument function of a
monochromator in the infrared region using the transmission
spectrum of the double Fabry-Perot etalon. Izv. AN SSSR. Ser.
fiz. 27 no.1:19-21 Ja '63. (MIRA 16:1)

(Spectrum analysis)

RUDENKO, G.A.; VASIL'YEV, A.F.

Quantitative analysis of the products of chlorination of n-butane.
Zav.lab. 29 no.5:563-564 '63. (MIRA 16:5)

1. Nauchno-issledovatel'skiy institut po udobreniyam i
insektofungisidam.
(Butane) (Chlorination) (Spectrum analysis)

VASIL'YEV, A.F.

Integral and peak intensity of the band of P=S stretching
vibration in esters of phosphorodithioic acid and some other
phosphorus compounds. Zhur.ob.khim. 33 no.3:874-878
Mr '63. (MIRA 16:3)
(Phosphorodithioic acid—Spectra)

VASIL'YEV, A.F.

Calculation of concentration dispersions for additive multi-component mixtures. Zav. lab. 31 no.11:1331-1337 '65.

Experimental verification of formulas for calculating average concentration dispersions of multicomponent mixtures.
Ibid.:1337-1341 (MIRA 19:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh sredstv zashchity rasteniy.

VASIL'YEV, A. G.

15054

USSR/Matches 4412.0100

Jul 1947

"Technical Policy of the Match Industry," A. G.
Vasil'yev, Engr, 2 pp

"Les Prom" No 7

Describes technical development of match industry
in USSR. Germans destroyed 10 large factories and
57 complex automatic machines, which in 1940 pro-
duced over 7 million boxes of matches. According
to Five-Year Plan, there are to be 36 match fac-
tories by 1950. Describes three types of multiple-
duty machines used in Soviet match industry.

LC

15054

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001858820005-4

VASIL'YEV, A.G.
VASIL'YEV, A.G.; KROKOS, T.P.

Central laboratory of the match industry. Der. prom. 6 no.11;17-18
N '57. (MIRA 10;11)
(Matches) (Labs)

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001858820005-4"

VASIL'YEV, A.G.; YERMAKOV, K.A., red.

[Internal combustion engines] Dvigateli vnutrennego sgoraniya; uchebnoe posobie. Leningrad, Leningradskii institut inzhenerov zheleznodorozhnogo transporta im. akad. V.N. Obraztsova, 1961. 53 p.
(Internal combustion engines) (MIRA 16:12)

ACCESSION NR: AR4035550

S /0271/64/000/003/A006/A006

SOURCE: Ref. zh. Avtomat., telemekh. i vy*chisl. tekhn. Sv. t., Abs. 3A45

AUTHOR: Zhitomirskiy, I. S.; Vasil'yev, A. G.; Klempner, K. S.

TITLE: Statistical reliability of relay-type devices under steady-state and transient conditions

CITED SOURCE: Sb. Radioizotopn. metody* avtomat. kontrolya. T. 1. Frunze,
AN KirgSSR, 1963, 31-41

TOPIC TAGS: relay reliability, contactless switch, register, statistical

TRANSLATION: Reliability of operation is considered of relay-type devices
(registers and contactless switches) under fluctuating-error conditions caused by
the random nature of radioactive decay. One illustration. Bibliography: 4 titles.

DATE ACQ: 17Apr64

SUB CODE: IE

ENCL: CO

Card 1/1

VASIL'YEV, A.G., dotsent, kand.tekhn.nauk

Analytical study of brake system operation of the diesel internal-combustion engine. Sbor. LIIZHT no.168:135-151 '60. (MIRA 13:10)
(Railroads—Brakes) (Diesel engines)

VASIL'YEV, A. G., KLEMPNER, K. S., and ZHITOMIRSKIY, I. S.

"Statistical Reliability of Relay Devices in Steady State and
Transient Processes"

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

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

VASIL'YEV, A.G.; KLEMPNER, K.S.; TATOCHENKO, L.K., doktor tekhnicheskikh nauk, retsentent; VERKHOVSKIY, B.I., inzh., red.; KURATSEV, L.Ye., red.izd-va; SMIRNOVA, G.V., tekhn.red.

[Relay devices with nuclear radiation sources] Releinye ustroistva s istochnikami iadernogo izlucheniia. Moskva, Mashgiz, 1963. 166 p.
(MIRA 17:3)

87960

S/115/60/000/012/014/018
B019/B056

9.6150

AUTHORS: Klempner, K. S. and Vasil'yev, A. G.

TITLE: Dynamic Error in Recording the Position of an Object by
Means of a Radiometric Relay

PERIODICAL: Izmeritel'naya tekhnika, 1960, No. 12, pp. 46-47

TEXT: The dynamic error in recording the position of an object depends on the response of the radiometric relay, which, in turn, depends on the rate of transients in the RC generator, on any dimension of the sensitive surface of the detector, on the geometrical position of the source and the detector, and on the velocity of the object. The authors study the dynamic error of a level gauge which operates with a nuclear radiation source. The extension of the sensitive surface of the detector in the direction of motion of the object is assumed to be 1, the velocity $v \neq 0$, and x is the current coordinate of the liquid level. A function $U(x)$ for the potential at the integrator output of the relay is obtained. By studying this relation, the authors see that with a low velocity of the object, the potential at the integrator output is a linear function of x . The dynamic

Card 1/2

Dynamic Error in Recording the Position of an
Object by Means of a Radiometric Relay

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S/115/60/000/012/014/018
B019/B056

error x_o is then $x_o < 1$. With increasing velocity, $x_o > 1$ until at very high velocities x_o becomes infinite. The following relations are obtained for the error:

$$x_o = vRC \ln \frac{U_1}{1} \cdot \frac{U_{0-1}}{U_1 - U_{0-1}} (\exp(1/vRC) - 1) \quad \text{for } x_o > 1, \text{ and}$$

$$x_o = \left(\frac{U_{0-1}^2 RC v l}{U_1} \right)^{1/2} \quad \text{for } x_o \leq 1.$$

R and C form the integrator; U_{0-1} is the potential at which the relay goes over from state 0 into state 1. From a study of these relations the authors conclude that the maximum dynamic error occurs when an integrator with a low time constant is used. With a decrease of the time constant of the integrator, the statistical error increases, which can only be equalized by increasing the emitter activity. There are 2 figures and 3 references:
y

Card 2/2

RYABUKHIN, Yu.S.; VASIL'YEV, A.G.; BELYAKOV, A.N.

Uniform irradiation of surfaces of objects by a pulse electron
beam. Atom. energ. 19 no.6:535-537 D '65.
(MTPA 19:1)

VASIL'YEV, A.G. --

"Glass Electrode Investigations Using Radioactive Indicators." Cand
Chem Sci, Khar'Kov State U, Khar'Kov, 1954. (RZhKhim, No 20, Oct 54)

Survey of Scientific and Technical Dissertation Defended at USSR
Higher Educational Institutions (10)

SO: Sum. No. 481, 5 May 55

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VISIBLE FLOWERS

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CIA-RDP86-00513R001858820005-4"

VASIL'YEV, A. G.
USSR/ Chemistry - Physical chemistry

Card 1/2 Pub. 147 - 14/21

Authors : Izmaylov, N. A., and Vasil'yev, A. G.

Title : Glass electrode investigated by means of the radioactive indicator method

Periodical : Zhur. fiz. khim. 29/10, 1866-1875, Oct 1955

Abstract : The anion and cation adsorption on an electrode glass in an acid medium was investigated by means of the radioactive indicator method. It was found that anion adsorption in highly-acid solutions increases sharply with the increase in acid concentration. The limit of anion absorption by glass depends upon the nature of the acid and type of glass. Cation adsorption in acid media was not observed. A comparison of the sorption

Institution : Kharkov State University im. A. M. Gorkiy

Submitted : March 18, 1955

Card 2/2

Pub. 147 - 14/21

Periodical : Zhur. fiz. khim. 29/10, 1866-1875, Oct 1955

Abstract : effect with the potential values of the glass electrode showed that the errors of the glass electrode in acid solutions are due to the penetration of the anions into the depth of the surface layer of the glass electrode. An equation, describing the behavior of a glass electrode in an acid medium, was introduced. Seventeen references: 13 USSR and 4 USA (1931-1954).

IZMAYLOV, N.A.; VASIL'YEV, A.G.

Ion exchange at a glass electrode. Zhur.fiz.khim. 29 no.12;
2145-2151 D '55.
(MLRA 9:5)

1. Khar'kovskiy gosudarstvennyy universitet imeni A.M. Gor'kogo.
(Ion exchange) (Electrodes, Glass)

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001858820005-4

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001858820005-4"

MIROSHNICHENKO, G.K., dots.; VASIL'YEV, A.G., kand.tekhn.nauk;
SHCHERBAKOV, V.I., inzh.; LUR'YE, D.A., inzh.

Automatizing the process of cupola charging and level control
by means of radioactive isotopes. Lit.proizv. no.8:14-15 Ag '57.
(MIRA 10:10)

(Cupola furnaces)
(Gamma rays--Industrial applications)

VASIL'YEV, A.G.; KLEMPNER, K.S. (Khar'kov)

Analyzing reliability of automatic gamma-ray relays. Avtom.i telem.
20 no.2:220-225 F '59. (MIRA 12:3)
(Automatic control) (Nuclear counters)

VASIL'YEV, A.G. (Khar'kov); ZHITOMIRSKIY, I.S. (Khar'kov); KLEMPNER, K.S. (Khar'kov)

Reliability criteria of automatic relay devices with radioactive emitters. Avtom.i telem. 21 no.2:245-253 F '60.

(MIRA 13:5)

(Switching theory)

AFANAS'YEV, V.N., kand.tekhn.nauk; BALYUK, F.B., inzh.; BERIN, A.L., inzh.;
VASIL'YEV, A.G., kand.khimicheskikh nauk; GRUZIN, P.L., doktor
tekhn.nauk; KOROBENNIK, V.F., inzh.; POLOVCHENKO, I.G., kand.tekhn.
nauk; SMIRNOV, V.G., inzh.; UZLYUK, V.N.

Control of the level of the blast furnace charge by means of gamma rays. Trudy Ukr. nauch.-issl. inst. met. no.7:51-80 '61.

(MIRA 14:11)

(Blast furnaces--Equipment and supplies)
(Gamma rays--Industrial applications)

VASIL'YEV, A.G.; ZHITOMIRSKIY, I.S.; KLEMPNER, K.S.

Classification of relay devices with nuclear radiation sources,
Izm. tekhn. no.7:53-56 Jl '63. (MIRA 16:8)

(Electric relays) (Nuclear instruments)

VASIL'YEV, A.G.

Simplified method for selecting the power of a diesel drive
of pumps in turbodrilling. Azerb.neft.khoz. 35 no.2:14 P '56.
(MLRA 9:10)

(Turbodrills) (Pumping machinery)

VASIL'YEV, A.G.

Determining hydraulic losses in drilling. Trudy AzNII DN no.5:
249-256 '57. (MIRA 12:4)
(Oil well drilling fluids)

VASIL'YEV, A.G., kandidat tekhnicheskikh nauk, dotsent.

Method of calculating the coefficient of resistance in a
hydraulic turbine. Sbor.LIIZHT no.149:133-142 '55.
(Hydraulic turbines) (MLRA 9:6)

VASIL'YEV, A.G.

Studying the crookedness of directional holes in the Pescharyy-More
region. Trudy AzNII DN no.10:257-270 '60. (MIRA 14:4)
(Karadag region--Oil well drilling, Submarine)

KARASHARLY, A.G.; VASIL'YEV, A.G.; BABAYEV, N.Kh.; MAKHMUDOV, Dzh.M.;
TALYBOV, N.Sh.

Efficient method for designing deep directional wells with
considerable deflections. Trudy AzNII DN no.10:271-285 '60.
(MIRA 14:4)
(oil well drilling)

ASKEROV, A.A.; VASIL'YEV, A.G.; SAFAROV, N.G.; SARKISOV, S.D.

Crookedness of well shafts as a factor preventing drilling to completion. Azerb. neft. Khoz. 41 no.1:14-16 Ja '62.

(Kyurov dag—Oil well drilling)

(MIRA 16:7)

VASIL'YEV, A.G.

Control of the efficient performance of pumps is a potential
for increasing drilling speed. Sbor. nauch.-tekhn. inform.
Azerb. inst. nauch.-tekhn. inform. Ser. Neft. prom. no.6:
23-29 '63. (MIRA 18:9)

L 14576-66 EWT(1)/EWA(h) TG
ACC NR: AT5028941

SOURCE CODE: UR/0000/63/000/000/0031/0041

-27

AUTHOR: Zhitomirskiy, I. S.; Vasil'yev, A. G.; Klempner, K. S.

ORG: none

TITLE: Statistical reliability of relay systems in stationary states and transient processes

SOURCE: Vsesoyuznyy seminar po primeneniyu radioaktivnykh izotopov v izmeritel'noy tekhnike i priborostroyenii. Frunze, 1961. Radioizotopnyye metody avtomaticheskogo kontrolya (Radioisotope methods of automatic control); trudy rasshirennogo soveshchaniya, v. 1. Frunze, Izd-vo AN KirgSSR, 1963, 31-41

TOPIC TAGS: reliability theory, electric relay, radioactive source, RADIOACTIVE DECAY

ABSTRACT: The paper deals with the reliability of a relay with respect to fluctuational errors caused by the random nature of radioactive decay. It is shown that the optimal measure of reliability for the operation of the instrument in a transient process is the probability of one and only one commutation of the relay during the interval of increase and decrease of the mathematical expectation of the control

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L 14576-66

ACC NR: AT5028941

signal. The optimal measure of reliability for contactless breakers is the probability of at least one commutation of the relay during the interval of increase and decrease of the mathematical expectation of the control signal. In addition to the earlier criteria of reliability of stationary regimes of relays, a new reliability criterion is introduced: the probability of the absence of relay commutations during a given time of operation in the stationary state. A numerical method of calculating reliability criteria is given. The use of this method presupposes the use of high speed computers. Orig. art. has: 1 figure, 31 formulas.

SUB CODE: 09,14/ SUBM DATE: 21Mar63/ ORIG REF: 002/ OTH REF: 000

(2)
Card 2/2

L 13803-66 EWT(m)/EPF(n)-2 DM/GG
ACC NR: AP6001799 SOURCE CODE: UR/0089/65/019/006/0535/0537

AUTHOR: Ryabukhin, Yu. S.; Vasil'yev, A. G.; Belyakov, A. N.

ORG: none

TITLE: The uniform irradiation of surface objects by a pulsed electron beam

SOURCE: Atomnaya energiya, v. 19, no. 6, 1965, 535-537

TOPIC TAGS: electron bombardment, irradiation apparatus, irradiation intensity,
"irradiat", "electron beam", "electron accelerat"

ABSTRACT: The authors investigate the conditions for the uniform irradiation of plane objects by means of electron accelerators, assuming that the surface under exposure is much larger than the cross section of the stationary electron beam. An analysis of the results shows that maximum permissible beam intensity increases with the value of the beam repetition time, the mean surface absorption dose, and the standard deviation of electrons from the axis of the beam, because each of the quantities contributes to an increase in the uniformity of irradiation. A brief discussion of the various methods of scanning is also given. Authors thank A. Kh. Breger for participating in the discussion of the results. Orig. art. has: 14 formulas and 2 figures.

SUB CODE: 2018 / SUBM DATE: 26Aug64 / ORIG REF: 002 / OTH REF: 002

PC
Card 1/1

UDC: 539.107

BUTYAGIN, Igor' Pavlovich; VASIL'YEV, Anatoliy Ivanovich; SUKHOBUKOV,
Lev Nikolayevich; MEN'SHIKOV, P.N., red.; GAVRILOVA, N.V.,
tekhn.red.

[Development of electric-power engineering in Siberia; popular
scientific presentation] Razvitiye energetiki Sibiri; nauchno-
populiarnyi ocherk. Novosibirsk, Novosibirskoe knizhnoe izd-vo,
1960. 97 p.
(Siberia--Electric power)

VASIL'YEV, A. I., inzh.; ARTEMOV, A.V.

Reinforcing a 120m reinforced concrete smokestack. Mont. i spets.
rebt.v.stroi. 22 no.4:25-27 Ap '60. (MIRA 13:8)

1. Chelyabinskoye upravleniye tresta Spetszhelezobetonstroy.
(Chimneys)

✓ H A U T E ✓ H A I.

M

*Influence of the Character of Preliminary Work-Hardening
on the Softening of a Metal [Tin] in Plastic Deformation.
A. I. Vasil'ev. (Zhur. Tekhn. Vieka, 1980, no. (4), 458-460;
Physics Abstr., 1981, **84**, 241).—[In Russian]. It is found
that in the tensile straining of Sn specimens after a preliminary
substantial deformation by extrusion through a die and
drawing, a reduction of the deforming force is observed,
which is contrary to normal experience. A possible explanation
is that in certain conditions the relief of the preliminary work-
hardening stresses exceeds the effect of the hardening process.

appr. 19.5.2

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001858820005-4

VASIL'YEV, A.I., inzhener.

Soviet pavilion at the World Exhibition in Brussels. Nov.tekh.
i pered.op. v stroi. 18 no.12:3-9 D '56.
(Brussels--Exhibitions) (MLRA 10:1)

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001858820005-4"

VASIL'YEV, A.I., kapitan meditsinskoy sluzhby

Influence of changes in the intestinal microflora in human
helminthiases on the course of bacillary dysentery. Voen.-med.
zhur. no.4:82 Ap [61.] (MIRA 15:6)
(WORMS) INTESTINAL AND PARASITIC)
(DYSENTERY)

VASIL'YEV, A.I., inzh.; OSHURKOV, I.S., inzh.

Centralized traffic control in large railroad junctions. Avtom.,
telem.i sviaz' 6 no.5:20-21 My '62. (MIRA 15:4)
(Railroads-Signaling)

VASIL'YEV, A.I., inzh.

Improvements in the overhauling of wells. Neftianik 5 no.8:19-
20 Ag '60. (MIRA 14:8)

1. Proizvodstvenno-tehnicheskoye otdeleniye neftepromyslovogo
upravleniya Tuymazaneft'.
(Oil wells--Maintenance and repair)

VASIL'YEV, A.I.; KADZHAN, L.N.; POGADAYEV, V.I.

Remodeling of the extruder nozzle of the KDH-2 machine. Torf. prom.
35 no.7:34-35 '58. (MIRA 11:11)

1. Torfpredpriyatiye Degtyarskoye.
(Peat machinery)

GANDZHA, L.I.; VASIL'YEV, A.I.; BREZE, Yu.K.

Stability of the equilibrium state of a potential self-oscillatory
generator-motor system. Trudy Inst. avtom. i elektrometr. SO AN SSSR
no.6:77-85 '64. (MIRA 17:10)

GANDZHA, L.I.; LYSHCHINSKIY, G.P.; VASIL'YEV, A.I.; BREZE, Yu.K.

Transient processes and oscillations in a nonlinear generator-motor system with varying magnetic flux. Trudy Inst. avtom. i elektrometr. SO AN SSSR no.6:64-76 '64. (MIRA 17:10)

VASIL'YEV, A.I.

Some data on the pairedness of the functions of human taste analyzer.
obtained during strictly localized chemical stimulation of the
tongue. Trudy Inst. fisiol. 9:295-301 '60. (MIRA 14:3)

1. Laboratoriya interotseptivnykh uslovnnykh refleksov (zaveduyushchiy -
E.Sh.Arapet'yants) Instituta fiziologii im. I.P.Pavlova.
(TASTE)

VASIL'YEV, A.I.

Compound method for studying the function of the gustatory analyser
in man. Trudy Inst. fiziolog. 6:172-182 '57. (MIRA 11:4)

1. Laboratoriya interotseptivnykh uslovnykh refleksov. (zaveduyushchiy
E.Sh. Ayrapet'yants).
(TASTE) (PHYSIOLOGICAL APPARATUS)

VASIL'YEV, A.I.

Bilateral nature of the activity of human parotid glands [with
summary in English]. *Fiziol.zhur.* 45 no.1:24-31 Ja '59.

1. From the laboratory of conditioned interoceptive reflexes, I.P.
Pavlov Institute of Physiology, Leningrad.
(PAROTID GLANDS, physiol.
bilateral factor in funct. (Rus))

(MIRA 12:2)

VASIL'YEV, A.I.

Method for unconditioned stimulation of the intact human bladder
with automatic registration of intracystic pressure and volume.
Fiziol.zhur. 44 no.10:997-1000 O '58 (MIRA 12:1)

1. From the laboratory of conditioned interoceptive reflexes,
I.P. Pavlov Institute of Physiology, Leningrad.
(BLADDER, physiol.
method of unconditioned irritation with intracystic
pressure & volume registration in man (Rus))

L 05238-67 EWP(k)/EWP(h)/EWT(d)/EWT(l)/EWP(l)/EWP(v)
ACC NR: AR6020530 SOURCE CODE: UR/0372/66/000/001/G015/G016
41
B

AUTHOR: Anisimov, A. S.; Vasil'yev, A. I.

TITLE: Synthesis of optimal controls in a microdrive system with a two-phase induction motor on taking into account the nonlinear performance characteristic of the motor

SOURCE: Ref. zh. Kibern, Abs. 1G111

REF SOURCE: Mezhvuz. sb. tr. Zap.-Sib. sovet po koordinatsii i planir. nauchno-issled. rabot po tekhn. i yestestv. naukam, vyp. 4, 1965, 12-23

TOPIC TAGS: miniature electric equipment, optimal control, electric motor, control theory

ABSTRACT: The problems of the synthesis of optimally rapid-acting controls in microdrive systems based on a 2-phase induction motor with amplitude and phase control are considered. In both cases allowance is made for the nonlinearity of the performance characteristic of the motor with respect to the control voltage and angular rotational speed of the motor. The problem is solved with the aid of the maximum principle. Equations of switching lines and formulas for optimal controls are derived. On the basis of these equations it is possible to determine the controlling part of the system during the operation of the motor at any point on

UDC: 62-505

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ACC NR: AR6020530

its performance curve. A special feature of optimal amplitude control is the presence of phase-plane regions in which it is necessary to realize a special control for which the magnitude of the control signal varies in accordance with a certain pattern without being equal to the maximum control value. The investigations performed showed that special control may, without involving any considerable error, be replaced with the control applying to the entire remaining phase plane. The resulting switching function is compared with the switching function derived earlier for a system with linear performance characteristic of the motor, and the limits of applicability of the latter are defined more precisely. Bibliography of 3 titles. V. Sh. [Translation of abstract]

SUB CODE: 09, 20/

Card 2/2 *gb*

VASIL'YEV, A.I., kand.med.nauk

Role of the sympathetic innervation in the function of the peripheral portion of the auditory analyzer. Zhur.ush., nos. 1 gorl.
bol. 22 no.4:9-12 Jl-Ag '62. (MIRA 16:2)

1. Iz kafedry otolaringologii (nachal'nik - zasluzhennyj deyatel' nauki prof. K.L. Khilov) Voyenno-meditsinskoy ordena Lenina akademii imeni S.M. Kirova.
(NERVES, SPINAL) (ACOUSTIC NERVE)

VASIL'YEV, A.I.

Allergic nature of the cystoid formations of the mucosa
of Highmore's antrum. Zhur. ush., nos. i gorl. bol. 23
no.1:20-23 Ja-F '63. (MIRA 17:2)

1. Iz kliniki bolezney ukha, gorla i nosa (nachal'nik -
zasluzhennyy deyatel' nauki prof. K.L. Khilov) Voyenno-
meditsinskoy ordena Lenina akademii imeni S.M. Kirova.

VASIL'YEV, A.I., kand.med.nauk

Role of the superior cervical sympathetic ganglion in the auditory function of the cochlea. Zhur. ush., nos.i gorl. bol. 23 no.3:59-62 My-Je'63. (MIRA 16:7)

1. Iz kafedry otolaringologii (nachal'nik- zasluzhennyy deyatel' nauki prof. K.L.Khilov) Voyenno-meditsinskoy ordena Lenina akademii imeni Kirova.
(LABYRINTH(EAR))(NERVOUS SYSTEM, SYMPATHETIC)

VASIL'YEV, A.I., kand.med. nauk; CHALOV, V.G.

Substantiation of the preservation of the head malleus in the
fenestration of the labyrinth. Zhur. ush., nos. i gorl. bol. 23
no.4:3-6 Jl-Ag'63. (MIRA 16:10)

1. Iz kafedry otorinolaringologii (nachal'nik - zasluzhennyj
deyatel' nauki prof. K.L.Khilov) Voyennomeditsinskoy ordena
Lenina akademii imeni S.M.Kirova.
(LABYRINTH (EAR) --- SURGERY)

VASIL'YEV, A.J., kand. med. nauk; CHALOV, V.G. (Leningrad)

Role of the muscles of the tympanic cavity in the mechanism of sound conduction in an experiment. Zhur., ush., nos. i ger. bol. 24 no. 289-12 Mr-Ap '64 (MIRA 18:1)

1. Iz kafedry o slaringologii (nachal'nik nauchno-znaniiye seyatiya nauki prof. K.L. Khilov) Voyennomeditsinskoy ord-na Lenina akademii imeni S.M. Kirova.

VASIL'YEV, A. I., kandidat tekhnicheskikh nauk

Automatic control of transient processes in the electric drive.
Trudy Transp.-energ.inst.Zap.-Sib.fil.AN SSSR no.2:67-72 '52.
(Electric driving) (Automatic control) (MIRA 8:12)

VASIL'YEV, A.I., kandidat tekhnicheskikh nauk.

~~Automatic control in connection with transient processes.~~

Trudy Transp.-energ.inst.Zap.-Sib.fil.AN SSSR no.6:53-62

'56.

(MLRA 10:2)

(Electric machinery) (Automatic control)

VASIL'YEV, A.I.
SHCHEBAKOV, V.K.; VASIL'YEV, A.I.; PUTILOVA, A.T.; ZAYNULLINA, R.S.

Outlook for the development of power resources in Western Siberia
and Krasnoyarsk Territory. Izv. vost. fil. AN SSSR no.1:79-87 '57.
(MIRA 11:4)

1. Zapadno-Sibirskiy sialial AN SSSR.
(Siberia, Western--Electric power)
(Krasnoyarsk Territory--Electric power)

VASIL'YEV, A.I.; OL'SHEVSKAYA, V.M.; SAVEL'YEV, V.A.; CHER'TSOV, M.B.

Power resources of Tyumen Province and measures for their utilization. Izv. Sib. otd. AN SSSR no.1:98-107 '58; (MIRA 11:8)

1.Zapadno-Sibirskiy filial AN SSSR.
(Tyumen Province--Power resources)

VASIL'YEV, A.I., kand.tekhn.nauk; STARODUBTSEV, N.L., inzh.; CHEL'TSOV, M.B.
~~TIMIN~~; SAVCHUK, M.G., inzh.

Peat is an important power fuel in Western Siberia. Torf. prom. 35
no.5:22-24 '58. (MIRA 11:10)

1.Transportno-energeticheskiy institut sapadno-sibirskogo filiala
AN SSSR (for Chel'tsov). 2.Novosibirskskoye mezhoblastnoye upravleniye
torfyanogo fonda (for Savchuk).
(Siberia, Western--Peat)

STARODUBTSEV, Nikolay Lukich; VASIL'YEV, A.I., kand. tekhn. nauk, otv. red.;
NAZARYANTS, T.M., red.; VYALYKH, A.M., tekhn. red.

[Power and fuel balance of Western Siberia] Toplivno-energeticheskii
balans Zapadnoi Sibiri. Novosibirsk, Izd-vo Sibirskogo otdeleniya
AN SSSR, 1960. 52 p. (MIRA 14:7)
(Siberia, Western--Power resources)

BUTYAGIN, Igor' Pavlovich; VASIL'YEV, Anatoliy Ivanovich; SUKHORUKOV,
Lev Nikolayevich [deceased]; CHEL'TSOV, Mikhail Borisovich;
TISTROVA, O.N., red.; BUL'DYAYEV, N.A., tekhn. red.

[Power production in Siberia] Energetika Sibiri. Moskva,
Gosenergoizdat. 1963. 95 p. (MIRA 16:8)
(Siberia—Electric power)

L 35002-65 EWT(a)/EXP(y)/EXP(k)/EXP(z)/EXP(l) Pf-1
ACCESSION NR: AP5007833 S-02-874-0001-003-00-3-0018

AUTHOR: Anisimov, A. S.; Vasil'yev, A. I.

TITLE: The determination of the response of an optimum regulator

SOURCE: AN SSSR. Sibirsckoye otdeleniye. Izvestiya. Seriya tekhnicheskikh nauk, no. 3, 1964, 34-38

TOPIC TAGS: optimum regulator, transient process duration, minimum response, automatic control system

ABSTRACT: In earlier papers (Izv. SO AN SSSR, ser. tekhn. nauk, 1963, vol. 10, no. 3), the authors derived expressions for the switching and optimum (in the sense of minimum response) regulator control utilizing an asynchronous two-phase motor with amplitude control. However, it is impossible actually to construct a regulator which has an ideal switching function (it is impossible to describe the switching function in an ideal way by means of the characteristic of an electronic element), and an ideal relay (one cannot design a relay which is free of hysteresis or lacks an insensitive zone). Nevertheless, during the design of an actual regulator, it is always useful to have given limits which can be approached. Also, it's equally important to know whether the chosen system utilizing a certain

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ACCESSION NR: AP5007833

actuating element will later satisfy, in operation, the dynamic requirements. Consequently, after establishing the basic equation, the authors derive a simple expression which allows the determination of the maximum value of the current within an ideal, optimum regulation law of the actuating element. The otherwise unknown gain, which depends on the parameters of the actuating motor and the characteristics of the load, is found from the above-mentioned condition.

ASSOCIATION: Institut avtomatiki i radioelektroniki Sibirskogo otdeleniya AN SSSR
Novosibirsk (Automation and electrometry institute, Siberian Department, AN SSSR)

SUBMITTED: DiApro-

Editor:

SUB CODE: 1E

NO REF Sov: 004

OTHER: 000

Card 2/2

L 35493-65 EWT(1)/EWA(h) Peb GG
ACCESSION NR AP5007834

S/0288/64/000/003/0039/0044

121

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L3

AUTHOR: Birin, G.D.; Vasil'yev, A.I.; Zagorskiy, V.T.

TITLE: The choice of parameters for compound transistorized switches 25

SOURCE: AN SSSR. Sibirskoye otdeleniye. Izvestiya. Seriya tekhnicheskikh nauk, no. 3, 1964, 39-44

TOPIC TAGS: compound transistorized switch, switch operation, compound switch, switch parameter, pulsed control

ABSTRACT: Recently, power transistors incorporated within a so-called compound switching circuit (T. A. Glazenko, Izv. VUZ, Priborostroyeniye, 1962, no. 6) have been utilized for the pulsed control of DC machines. The circuit, shown in Figure 1 of the Enclosure, consists of two transistors; the saturation operation of one of them (power) is achieved by means of a strong positive feedback, while the second (auxiliary) transistor plays the role of an amplifier within the feedback branch. The present paper reports on the operating conditions of the compound switch in AC circuits. Such conditions are encountered in frequency converters in feeding power to motors. After discussing the principles of operation of compound switches within AC circuits, the authors discuss the

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L 35493-65
ACCESSION NR: AP5007834

choice of their parameters. They recommend that the power transistor be saturated for arbitrary values of the collector current by an approximately constant magnitude of the excess base current. Orig. art. has: 3 formulas and 4 figures.

ASSOCIATION: Institut avtomatik i elektrometrii Sibirskogo otdeleniya AN SSSR,
Novosibirsk Institute for Automation and Electrometry, Siberian Section, AN SSSR

SUBMITTED: 28Mar64 ENCL: 01 SUB CODE: EC, IE
NO REF SOV: 002 OTHER: 000

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ACCESSION NR: AP5007834

ENCLOSURE: 01

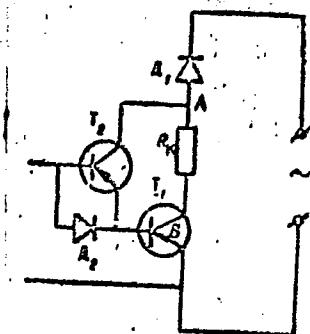


Fig. 1. Transistorized compound switching circuit.

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L 60397-65 EWT(d)/EWP(v)/EWP(k)/EWP(h)/EWP(l) PF-L

ACCESSION NR: AP5016977

UR/0280/C5/000/003/0139/0147

15

B

AUTHOR: Anisimov, A. S. (Novosibirsk); Vasil'yev, A.I. (Novosibirsk)

TITLE: The study of the dynamics of optimum regulators

SOURCE: AN SSSR. Izvestiya. Tekhnicheskaya kibernetika, no. 3, 1965, 139-147

TOPIC TAGS: optimum regulator, actuator motor control, sectionally linear switching, stepwise interaction control, regulator transient, regulator dynamics

ABSTRACT: The qualitative pattern of the dynamics of optimum (in the sense of speed) regulators with asynchronous two-phase actuator motors (see Fig. 1 of the Enclosure) is studied for the case of stepwise interaction, sectionally linear approximation of the switching line, and substitutions of the true relay characteristic by characteristics of different kinds. The authors show that depending on the direction in which the real switching line drifts away from the ideal, i.e., the transient processes within the system may either be oscillatory or go over into the settling (settling) condition. In the first mentioned case, they establish analytical relations connecting, in a general manner, the parameters of the object and of the regulator with the main indices of the transient process. These expressions may be used for the analysis and synthesis of optimum (fast) regulators. Other derived expressions allow an estimate of the quality indices of the

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ACCESSION NR: AP5016977

transient process during changes in the object's parameters or during input interactions differing from stepwise signals. To obtain the optimum operation under the last mentioned circumstances, the switching time must have to be transferred to the phase plane. Orig. art. has 21 formulas, 8 figures, and 1 table.

ASSOCIATION: None

SUBMITTED: 06Apr64

ENCL: 01

SUB CODE: IF

No. 1,611 Sov. 1964

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ACCESSION NR: AP6016977

ENCL: 01

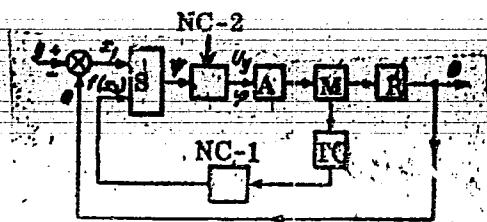


Fig. 1. Structural diagram of the optimum regulator.

NC-1, NC-2 - nonlinear converters.

S - adder.

A - amplifier.

M - motor.

TG - tachogenerator

R - reducer

Card 0/3

32740-66 EWT (1)

ACC NR: AT6011934

SOURCE CODE: UR/0000/66/000/000/0131/0138

AUTHOR: Anisimov, A.S. (Novosibirsk); Vasil'yev, A.I. (Novosibirsk)

58

2+1

ORG: none

TITLE: Improvement in the dynamic properties of the microelectromotors of automatic measuring systems

29

SOURCE: Vsesoyuznaya konferentsiya po avtomaticheskому контролю и методам электрических измерений, 5th. Avtomatichesklyy kontrol' i metody elektricheskikh izmereniy; trudy konferentsii, t. 2: Izmeritel'nyye informatsionnyye sistemy. Ustroystva avtomaticheskogo kontrolya. Elektricheskiye izmereniya neelektricheskikh velichin (Automatic control and electrical measuring techniques; transactions of the conference, V. 2: Information measurement systems. Automatic control devices. Electrical measurements of nonelectrical quantities). Novosibirsk, Izd-vo Nauka, 1966, 131-138

TOPIC TAGS: automatic control design, electric motor, miniature electric equipment

ABSTRACT: Asynchronous two-phase electromotors are the most widespread a.c. motors in automatic control, measuring technology, and telemechanics. Among the methods for optimizing the dynamic properties of systems is the maximum principle (L. S. Pontryagin, V. G. Boltyanskiy, R. V. Gamkrelidze, Ye. F. Mishchenko, Mathematical theory of optimum processes, M. Fizmatgiz, 1961). The present authors utilize the principle for the synthesis of optimum (with respect to speed) control systems using asynchronous two-phase micro-

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