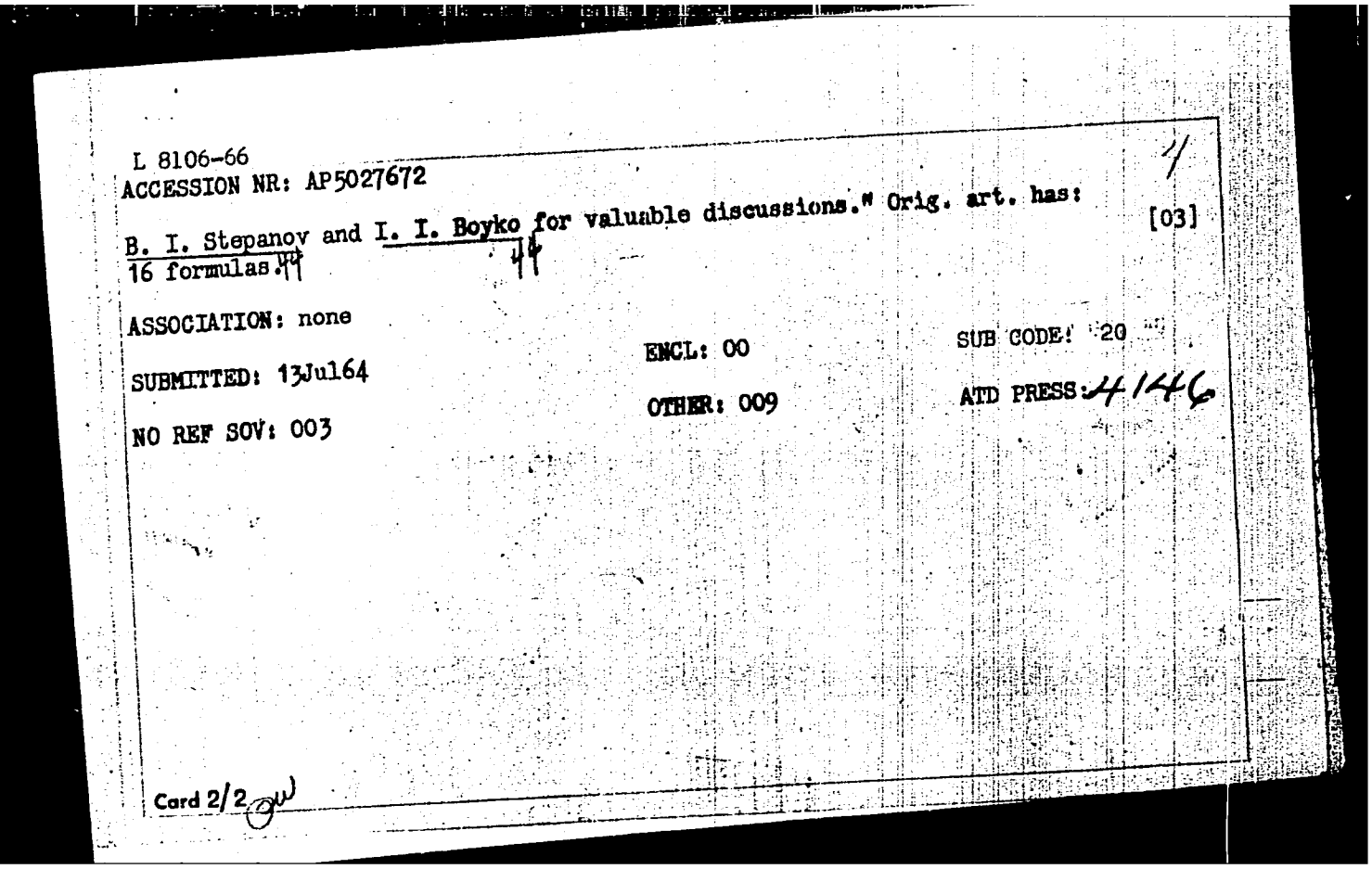
"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8



L 8106-66
ACCESSION NR: AP5027672

B. I. Stepanov and I. I. Boyko for valuable discussions." Orig. art. has: [03]
16 formulas.

ASSOCIATION: none

SUBMITTED: 13Jul64 ENCL: 00 SUB CODE: 20

NO REF SOV: 003 OTHER: 009 ATD PRESS: 4146

Card 2/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

ACCESSION NR: AR4014945 S/0271/63/000/012/B003/B003

SOURCE: RZh. Avt., tel. i vy*chisl. tekhnika, Abs. 12B10

AUTHOR: Sotskiy, N. M.

TITLE: On the organization of information transfer among the elementary machines of a computer system

CITED SOURCE: Sb. Vy*chisl. sistemy*. Vy*p. 3. Novosibirsk, 1962, 31-36

TOPIC TAGS: information transfer, computer, computer system, address, addressing, computer self-organization, computer self-learning

TRANSLATION: The author discusses the problem of information transfer among the elementary machines (EM) in a computer system. In examining the organization of direct links between EM, the author proceeds from the assumption that EM must be connected by two-way communications channels. Then the total number of channels M is equal to $\frac{N(N-1)}{2}$ where N is the total number of EM. Variants of communications system organization among EM with the aid of special addressing are considered. In the coordinative addressing technique, each EM is assigned a point in an

Card 1/2

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ACCESSION NR: AR4014945

n-dimensional space. The EM address is an n-dimensional vector. The associative addressing method makes it possible to direct messages to the addressee without precise specification of the address; in this case, the characteristics determining the addressee are analyzed. The author points out the possibility of investigating the problems of self-learning and self-organization with the aid of the information transfer scheme discussed in the article. I.P.

DATE ACQ: 09Jan64 SUB CODE: CP ENCL: 00

Card 2/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

SOTSKIY, V.A.; FEDOROV, F.I.

Molecular theory of reflection and refraction of light. Part 1: Incidence of light from vacuum on an isotropic medium. Opt. i spektr. 4 no.3:365-372 Mr '58. (MIRA 11:4)

1. Belorusskiy gosudarstvennyy universitet.
(Reflection (Optics)) (Refraction)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

VENGLINSKIY, V.V.; DENISENKO, K.V.; SOTSKOV, A.A.; SHPIGEL', A.M.; GORDON, Kh.I., inzh., retsenzent; SHAKHNAZAROV, M.M., retsenzent; DAYON, A.Ye., inzh., red.; PETUKHOVA, G.N., red. izd-va; TIKHANOV, A.Ya., tekhn. red.

[Establishing technical norms in the instrument industry] Tekhnicheskoe normirovanie truda v priborostroenii; spravochnoe posobie. Moskva, Mashgiz, 1962. 511 p. (MIRA 15:9)

(Instrument industry—Production standards)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

SOTSKOV, A. D.

"Application of Radio-active Isotopes in Solving Diffusion in Metals Theory Problems," A.A. Yukhovitskiy, M.Ye. Yanitskaya, Sotzkov, A.D., Moscow, USSR

Paper submitted for presentation at the International Conference on Radioisotopes in Scientific Research, Paris, 9-20 Sep 1957.

Moscow Steel Inst, Min Higher Education,

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

SOTSKOV, A.D., Cand Tech Sci -- (diss) "Diffusion and autodiffusion in heterogeneous systems." Mos, 1958, 12 pp (Min of Higher Education USSR. Mos Order of Labor Red Banner inst of Steel im I.V. Stalin) 120 copies (KL, 21-58, 91)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

AUTHORS: Sotskov, A. D., Zhukhovitskiy, A. A. SOV/163-58-1-33/53

TITLE: On the Hydrodynamic Course in Phase Transformations (O gidrodinamicheskom techenii pri fazovykh prevrashcheniyakh)

PERIODICAL: Nauchnyye doklady vysshey shkoly. Metallurgiya, 1958, Nr 1, pp 182-187 (USSR)

ABSTRACT: In special investigations the displacement rate between the boundary layer of saturated and unsaturated phases of the systems Ag-Cu, Fe-Cu and Fe-Sn could be determined. The results obtained show that the displacement of this boundary is a consequence of diffusion.
The dependence of the displacement between the phases at the time of solidification in the systems Cu-(α+β), Ag-(α+β), Fe-(α+Fe_2Sn) and Cu-(ε+γ) was graphically represented.

In the heterogeneous transformation hydrodynamic processes occur in which the insoluble impurities move towards the boundary layer of the crystals. In the system Cu-Fe the rate of impurification increases according to the increase in the ε-phase.
There are 4 figures, 1 table, and 4 references, 1 of which is Soviet.

Card 1/2

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

SOV/163-58-1-33/53

On the Hydrodynamic Course in Phase Transformations

ASSOCIATION: Moskovskiy institut stali (Moscow Steel Institute)

SUBMITTED: October 11, 1957

Card 2/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

AUTHORS: Zhukhovitskiy, A. A., Sotskov, A. D. SOV/163-58-1-39/53

TITLE: On the Use of Radioactive Indicators in Investigating Reactive Diffusion (O primenenii radioaktivnykh indikatorov pri izuchenii reaktivnoy diffuzii)

PERIODICAL: Nauchnyye doklady vysshey shkoly. Metallurgiya, 1958, Nr 1, pp 211-217 (USSR)

ABSTRACT: Investigating the reactive diffusion by means of radioactive indicators makes it possible to determine important characteristics in the process of reactive diffusion, especially the increase rate as well as the disappearance of a new phase in the alloys.
The diffusion coefficient was determined by the following equation:

$$D = \frac{ml^2}{\pi^2},$$

where l denotes the thickness of the metal platelet investigated, m the tangent of the angle of inclination in the coordinates $\ln \frac{J_1 - J_2}{J_1 + J_2} - \tau$, J_1 the radiation intensity of the one side

Card 1/2

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

On the Use of Radioactive Indicators in Investigating Reactive Diffusion

of the platelet, and J_2 the radiation intensity of the other side of the platelet; τ denotes the diffusion period.
The experiments were carried out in the system Ag-Cu at temperatures of 700, 725, 750, 800 and 850°, as well as in the system Fe-Cu at temperatures of 925, 1000 and 1050°. Iron and silver isotopes were used as radioactive indicators. The diffusion coefficient was calculated from the kinetic curves, and agrees with the data in publications.
The beginning of the diffusion process in the alloys themselves, especially the β-phase, was investigated in the system Fe-Cu. The diffusion coefficient was calculated in the system Ag-Cu at temperatures of 750 to 800°.
By this method the phase transformation rate can be determined conveniently and most accurately (to 0,01 μ).
There are 4 figures, 3 tables, and 10 references, 9 of which are Soviet.

Card 2/2

ASSOCIATION: Moskovskiy institut stali (Moscow Steel Institute)

SUBMITTED: October 11, 1957

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

SOTSKOV, A.D

PHASE I BOOK EXPLOITATION SOV/5559

Akademiya nauk SSSR. Institut metallurgii. Nauchnyy sovet po probleme zharoprochnykh splavov

Issledovaniya po zharoprochnym splavam, v. 5 (Investigations of Heat-Resistant Alloys, Vol 5) Moscow, Izd-vo AN SSSR, 1959. 423 p. Errata slip inserted. 2,000 copies printed.

Ed. of Publishing House: V.A. Klimov; Tech. Ed.: I.P. Kostina; Editorial Board: I.P. Bardin, Academician, G.V. Kurdyumov, Academician, N.V. Agreyev, Corresponding Member, USSR Academy of Sciences (Resp. Ed.), I.A. Oding, Corresponding Member, USSR Academy of Technical Sciences, I.N. Fridlyander, and I.F. Zemlin, Candidate of Technical Sciences.

PURPOSE: This book is intended for metallurgical engineers, research workers in metallurgy, and may also be of interest to students of advanced courses in metallurgy.

COVERAGE: This book, consisting of a number of papers, deals with the properties of heat-resisting metals and alloys. Each of the papers is devoted to the study of the factors which affect the properties and behavior of metals. The effects of various elements such as Cr, Mo, and W on the heat-resisting properties of various alloys are studied. Deformability and workability of certain metals as related to the thermal conditions are the object of another study described. The problems of hydrogen embrittlement, diffusion and the deposition of ceramic coatings on metal surfaces by means of electrophoresis are examined. One paper describes the apparatus and methods used for growing monocrystals of metals. Boro-base metals are critically examined and evaluated. Results are given of studies of intermetallic bonds and the behavior of atoms in metal. Uses of turbine and compressor blades are described. No personalities are mentioned. References accompany most of the articles.

AVAILABLE: Library of Congress

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APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

SOTSKOV, A.D.

Diffusion in heterogeneous systems. Izv.Sib.otd.AN SSSR no.1:84-97 '60. (MIRA 13:7)

1. Moskovskiy institut stali im. I.V. Stalina.
(Diffusion)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

SOTSKOV, A.D.; GAO I-SHAN'; ZHUKHOVITSKIY, A.A.

Radioisotopes in the study of diffusion processes accompanied by phase transitions and chemical transformations. Izv.vys. ucheb.zav.;khim. i khim.tekh. 3 no.3:452-456 '60. (MIRA 14:9)

1. Moskovskiy institut stali imeni I.V. Stalina, kafedra fizicheskoy khimii.
(Diffusion) (Radioisotopes)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

ARTEM'YEVA, N.K.; VAYLUKOVA, G.A.; OCHNEVA, I.N.; SOTSKOVA, A.S.; BORISOV, G.A.

Recovery of zinc sulfate from settling and plastification baths. Khim. volok. no.5:67-68 '65. (MIRA 18:10)

1. Krasnoyarskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta iskusstvennogo volokna (for Artem'yeva, Vaylukova, Ochneva). 2. Krasnoyarskiy zavod iskusstvennogo volokna (for Sotskova, Borisov).

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

SOTNIKOV, S. S.

SA

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8

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

S1.318.5 — 82 340

A simple device for measuring the times of operation and release of a relay." Sotnikov, S. S. Izv. Elek. [illegible] Svyaz. Tekh. No. [illegible] [illegible] Abstr. in Wireless Engr. [illegible] p. 311, Oct., [illegible].—A circuit in which a capacitor C, charging through a resistance R, serves as a time-measuring element, and a neon lamp as an indicator. R and C are adjusted to prevent the lamp from striking, and from these values the time constants can be determined. The accuracy of the device is of the order of 1 ms. E. R. A.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

SOTSKOV, [illegible]

don't capitalize the title

231. METHODS FOR DESIGNING A.C. MAGNETIC CIRCUITS ALLOWING FOR IRON LOSSES, [illegible] (Russian)
Elektrapromi. Slab. Toka, No. [illegible], 1940, pp. [illegible]

Fundamental relationships between the alternating magnetic flux in a closed magnetic circuit, the ampere-turns, and the magnetic constants are derived. Since, however, equations of the 4th and even 6th degree are involved, graphical methods are proposed to simplify calculations.

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

SOTSKOV, B.S.

Subsidiary apparatus + materials

Avtomat. i Telemekh.

1313. THERMO-RELAYS. — Sotskov. (Avtomatika i Telemekhanika [in Russian], No. 2, 1941, pp. 51-72.) Thermo-relays are discussed under two main headings: (1) those utilising dimensional changes with temperature, and (2) those using changes in electrical parameters. Under the first heading relays in which different components absorb different amounts of radiated energy are also considered. Under the second heading are included relays in which a coil is pulled into or pushed out of a cylinder and relays with a variable resistance (for example a copper-oxide rectifier). The theory of each of the above types is discussed in detail and formulae are derived necessary for design work.

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

SHCHUKIN, B.K.; KOVALENKOV, V.I., retsenzent; SOTSKOV, B.S., retsenzent; PEREKALIN, M.A., redaktor; SKVORTSOV, I.M., tekhnicheskiy redaktor.

[Fundamentals of remote control engineering] Osnovy tekhniki teleupravleniia. Moskva, Gos.energ.izd-vo, 1945. 403 p. (MLRA 8:11)
(Remote control)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

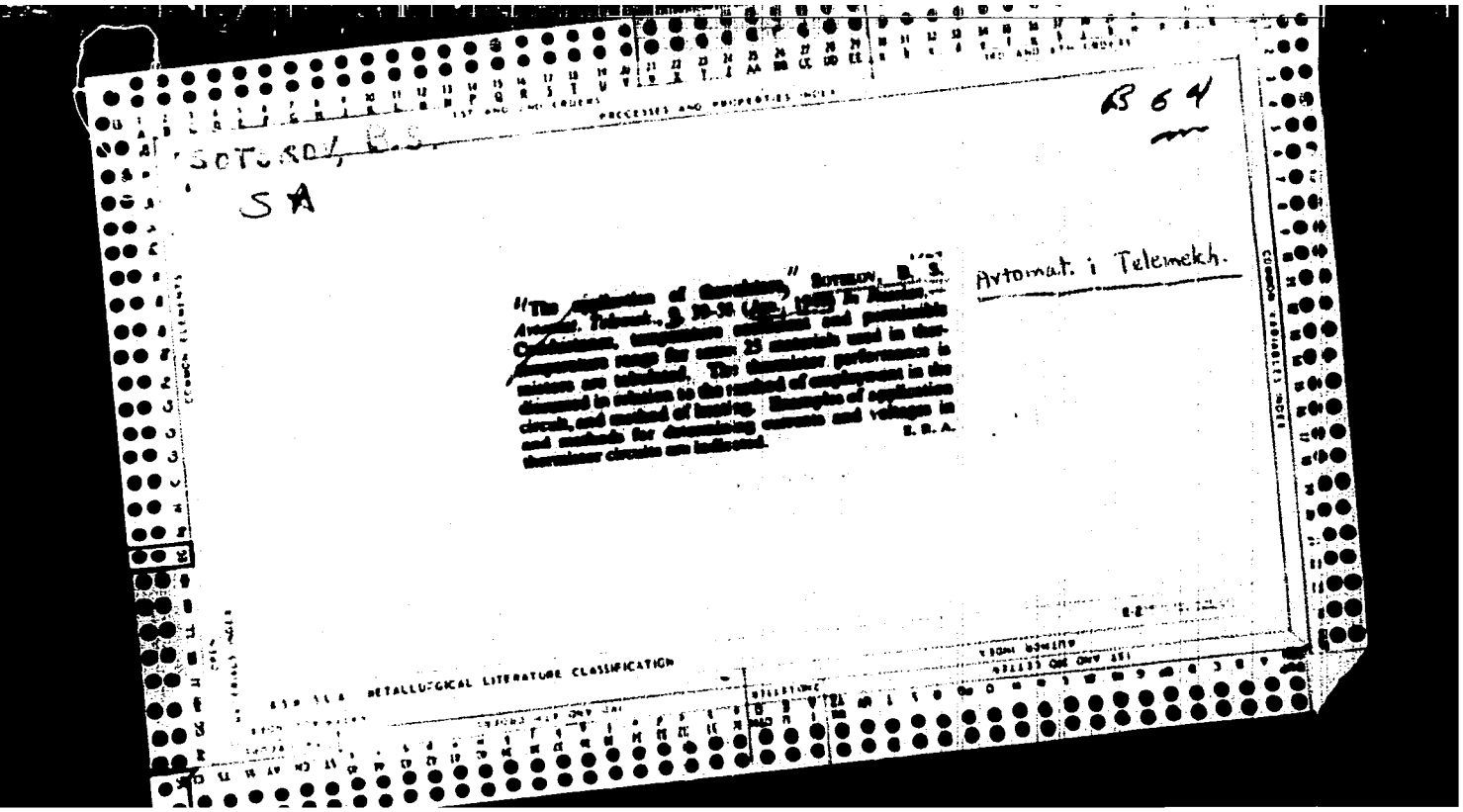
SOTSKOV, B. S.

Institute of Automatics and Telemechanics, Academy of Sciences, USSR. "A Method for Approximate Time Calculation of the Flow Process in Circuits with Nonlinear Parameters," Iz. Ak. Nauk SSSR, Otdel. Tekh. Nauk, No. 12, 1945. Submitted 6 Aug 1945.

Report U-1582, 6 Dec. 1951.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8



APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

SOTSKOV, B. S.

"General Formual for Voltage and Current in the Measuring Diagonal of a Wheatstone Bridge with Non-Linear Resistance," Avto. i Tele., IX, No. 5, 1948.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

SOTSKOV B. S. TA 44/49T34

USSR/Electronics
Relays

May/Jun 49

"The Problem of Impulse Operation of Relays and Electromagnets," B. S. Sotskov, Inst of Automatics and Telemech, Acad Sci USSR, 6 pp

"Avtomat i Telemekh" Vol X, No 3

States development of "targets" method for impulse operation of electromagnetic devices for cases of voltage change in the current source, and incomplete closing and opening of the movable system (electromagnet armature). Submitted 28 Feb 48.

44/49T34

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

SOTSKOV, B. S.

USSR/Electricity - Personalities

Dec 51

"Academician V. S. Kulebakin (His 60th Birthday)," V. A. Trapeznikov, M. P. Kostenko, B. N. Petrov, N. V. Gorokhov, V. L. Lossiyevskiy, B. S. Sotskov, M. G. Chilikin, G. M. Petrov, A. N. Larionov, A. G. Iosif'yan, K. N. Bobov, D. A. Gorodetskiy

"Elektrichestvo" No 12, p 88

Kulebakin is very well known in the fields of elec machines, elec equipment, automatic control, and illuminating engineering and has specialized for many years in aviation elec equipment. A major general in the aviation engineering service, he was one of the founders of the All-Union Elec Eng Inst and the Inst of Automatics and Telemechan and has headed chairs at the Moscow Power Eng Inst imeni Molotov and the Air Force Eng Acad imeni Zhukovskiy.

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APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

SOTSKOV, B. S.

Electric Controllers

"Method of calculating electromagnetic couplings filled with ferromagnetic semi-liquid masses, applied for controlling the velocity and direction of rotation," Avtomat. i Telemekh. 12, No. 4, (1951)

9. Monthly List of Russian Accessions, Library of Congress, August 1952 1953, Uncl.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

SOKOLOV, B. I., [illegible] I. Ya., [illegible] M. A.

Electric Relays

"Dependance of the time of motion of a movable relay system on the relay parameter," Avtom. i telem., 12, No. 4, (1952)

9. Monthly List of Russian Accessions, Library of Congress, August 1952 1953, Uncl.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

SOTSKOV, B. S.

PHASE X TREASURE ISLAND BIBLIOGRAPHICAL REPORT AID 731 - X

BOOK Call No.: TJ213.S6

Author: SOTSKOV, B. S.
Full Title: PRINCIPLES OF CALCULATION AND DESIGN OF THE COMPONENTS OF AUTOMATIC- AND REMOTE CONTROL SYSTEMS
Transliterated Title: Osnovy rascheta i proyektirovaniya elementov avtomaticheskikh i telemekhanicheskikh ustroistv

PUBLISHING DATA
Originating Agency: None
Publishing House: State Power Engineering Publishing House
Date: 1953 No. pp.: 544 No. of copies: 15,000
Editorial Staff
Appraisers: R. P. Kosenko and Yu. S. Shimanskiy

PURPOSE AND EVALUATION: The book is written for students and technicians specializing in the fields of automation, remote control, manufacturing of electrical instruments, etc. It was admitted as a textbook by the Ministry of the Electric Power Stations and Electrical Industry of the USSR in technical schools for courses on the theory and design of automatic control systems. The subject is a comprehensive one, and one which should be the subject of a separate book. However, it seems that no such book exists in the English language. There are several publications and articles devoted to components of automatic

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

Osnovy rascheta i proyektirovaniya elementov avtomaticheskikh i telemekhanicheskikh ustroistv

AID 731 - X

and remote control systems, but none are wide in scope. The majority are published by manufacturers and discuss exclusively the products of the given manufacturer.

TEXT DATA

Coverage: The book presents the basic tools necessary for understanding and carrying out the major portion of the design work of the components of automatic control systems. It also presents the theory and calculations of the basic types of control systems. The discussion is illustrated with examples of practical significance. According to their purpose and place of location in the control systems, components are classified into three major groups: 1. Receivers of input signals (relay-type servomechanisms with pulsed data, and transmitters of continuous control data); 2. Intermediate components (feedback amplifiers, distributors, equalizers, computing devices [adding, multiplying, integrating and differentiating elements], and components of remote transmission; 3. Executive components, of which there is a great variety. The book is amply illustrated, contains many numerical tables, an index, and a list of references.

Table of Contents

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

Osnovy rascheta i proyektirovaniya elementov avtomaticheskikh i telemekhanicheskikh ustroistv

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and remote control systems, but none are wide in scope. The majority are published by manufacturers and discuss exclusively the products of the given manufacturer.

TEXT DATA

Coverage: The book presents the basic tools necessary for understanding and carrying out the major portion of the design work of the components of automatic control systems. It also presents the theory and calculations of the basic types of control systems. The discussion is illustrated with examples of practical significance. According to their purpose and place of location in the control systems, components are classified into three major groups: 1. Receivers of input signals (relay-type servomechanisms with pulsed data, and transmitters of continuous control data); 2. Intermediate components (feedback amplifiers, distributors, equalizers, computing devices [adding, multiplying, integrating and differentiating elements], and components of remote transmission; 3. Executive components, of which there is a great variety. The book is amply illustrated, contains many numerical tables, an index, and a list of references.

Table of Contents

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

BOTSKOV, V. S.

Dissertation: "Elements of Automatic and Telemechanical Apparatus," Dr Tech Sci, Inst of Automatics and Telemechanics, Acad Sci USSR, 15 Apr 54. (Vechernyaya Moskva, Moscow, 6 Apr 54)

SO: SUM 243, 19 Oct 1954

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

TEMNIKOV, F.Ye.; SOTSKOV, B.S., kandidat tekhnicheskikh nauk, retsenzent; KASATKIN, A.S., professor, redaktor; MODEL', B.I., tekhnicheskiy redaktor.

[Automatic recording instruments] Avtomaticheskie registrituiushchie pribory. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1954. 370 p. (MLRA 8:2)
(Recording instruments)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

IORDAN, G.G.; BRODSKIY, V.B.; SOTSKOV, B.S.

[Using radioactive isotopes for controlling technological processes] Primenenie radioaktivnykh izotopov dlia kontrolia tekhnologicheskikh protsessov. Moskva, 1955. 17 p.
(MIRA 14:7)

(Radioisotopes—Industrial applications)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

[redacted]

"Application of Radioisotopes to Control Technological Processes,"
a paper presented at the Atoms for Peace Conference, Geneva, Switzerland,
1955

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

SOTSKOV, B. S. Doctor of Technical Sciences

"The Most Important Trends in the Development of the Theory and Principles of Construction of Automation Components." a paper given at the Conference on Scientific Problems of Production Automation, Moscow State U. 15-20 Oct 1956.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

[redacted], B. S.

"Reliability of the Work of the Contacts of Relay Elements" (Nadeshnost' raboty kontaktov releynykh elementov) from the book Telemechanization in National Economy, pp. 59-70, Izdat. AN SSSR, Moscow, 1956

(Given at meeting held in Moscow, 29 Nov to 4 Dec 54 by Inst. of Automatics and Telemechanics AS USSR)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

112-57-8-16692

Translation from: Referativnyy zhurnal, Elektrotekhnika, 1957, Nr 8, p 105 (USSR)

AUTHOR: Sotskov, B. S.

TITLE: Application of Noncontact Control Elements to the Automatic Electric Drive for Machines and Machine Lines (Primeneniye elementov beskontaktnogo upravleniya v avtomatizirovannom elektroprivode stankov i stanochnykh liniy)

PERIODICAL: V sb.: Avtomatizatsiya tekhnol. protsessov v mashinostr. Privod i upravleniye mashinami (Collection: Automation of Technological Processes in Machine Building. Drive and Control of Machines), Moscow, AS USSR, 1956, pp 120-132

ABSTRACT: Principal characteristics and methods of functioning of noncontact inductive pickups used in various automatic installations are discussed. Pictorial diagrams of various types of inductive pickups are presented. A comparison of variable-inductance pickups and variable-mutual-inductance pickups is offered. Analytical expressions are derived which determine the following fundamental characteristics of an inductive pickup: the relationship between the pickup resistance and its armature travel, the voltage-current characteristic

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SOTSKOV, B.S.

International Industrial Fair at Milan. Priborostroenie no.11:26-28 N '56. (MLRA 10:1)
(Milan--Exhibitions) (Instuments)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

SOTSKOW B.S.

Elementy urządzeń automatyki i telemechaniki (Elements of installations of automatics and telemechanics) by B.S. Sotskow. Reported in New Books (Nowe Ksiazki.) February 15, 1956. No. 4.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

TOPCHIYEV, A.V., akademik, glavnyy redaktor; SOTSKOV, B.S., doktor tekhnicheskikh nauk, otvetstvennyy redaktor; AGEYKIN, D.I., redaktor; SUBBOTINA, G.V., redaktor; SHORYGIN, A.P., redaktor; YARMOL'CHUK, G.G., redaktor; KISELEVA, A.A., tekhnicheskiy redaktor

[A session of the Academy of Sciences of the U.S.S.R. on scientific problems in automatization of production, October 15-20, 1956; scientific principles for setting up technical means of automatization] Sessiia Akademii nauk SSSR po nauchnym problemam avtomatizatsii proizvodstva, 15-20 oktiabria 1956 g.; nauchnye osnovy postroeniia tekhnicheskikh sredstv avtomatiki. Moskva, 1957. 186 p.
(MLRA 10:5)

(Automatic control)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

TRAPITSYN, Valentin Ivanovich; SOTSKOV, B.S., doktor tekhnicheskikh nauk, retsenzent; SABININ, Yu.A., kandidat tekhnicheskikh nauk, redaktor; CHFAS, M.A., redaktor izdatel'stva; SOKOLOVA, L.V., tekhnicheskiy redaktor

[Automatization of production processes of industrial equipment] Avtomatizatsiia proizvodstvennykh protsessov promyshlennykh ustanovok. Moskva, Gos. nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1957. 317 p. (Automatic control) (MLRA 10:9)

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

8(0) SOV/112-58-3-4309

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1958, Nr 3, p 128 (USSR)

AUTHOR: Sotskov, B. S.

TITLE: Major Trends in Development of the Theory and Construction Principles of Automatic and Telemechanical Components (Vazhneyshiye napravleniya v razvitii teorii i printsipov postroyeniya elementov avtomatiki i telemekhaniki)

PERIODICAL: Sessiya AN SSSR po nauchn. probl. avtomatiz. proiz-va, 1956, Vol 3, M., AS USSR, 1957, pp 5-16

ABSTRACT: Major trends and objectives in development of the theory and construction principles of the components and assemblies for automatic supervision, control, protection, and regulation, which are to be developed in the next 10-15 years, are considered. The principal theoretical objectives are: (a) developing a theory of transformations that take place in the components and assemblies and (b) developing a theory of reliability of operation of components and assemblies. The first theory should examine all

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Major Trends in Development of the Theory and Construction Principles of . . . .

physically possible direct and indirect transformations in order to determine possible ties between the input and output variables. The mathematical part of the transformation theory should permit analytical determination or synthetic setup of the functional relations between the input and output variables on the basis of known relations for individual components or subcomponents. A theory of static and dynamic accuracy of transformations should be developed with an allowance for the internal and external factors influencing the characteristics and parameters of the transforming device. The reliability theory should be based on an investigation of the influence of external factors and functional specific mechanical, thermal, and electrical characteristics and parameters upon the service life of components. The reliability problems of components with continuous and discrete transformations should be solved, as well as the reliability problems of the schemes and systems with variously connected individual components. Methods for selecting the components and

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8(0) SOV/112-58-3-4309

Major Trends in Development of the Theory and Construction Principles of . . . .

their functions, meeting a specified degree of reliability of the components and the entire system, should be developed. A few groups of objectives that are to be attained are listed: (1) using the physical properties of semiconductor, conductor, and dielectric materials; (2) investigating and developing the components with a number of intermediate transformations; (3) using the auxiliary physical processes, mainly associated with various radiations (acoustical, optical, electromagnetic, radioactive, etc.); (4) using the spectroscopic, radiospectroscopic, gamma-, and neutron-diffraction methods, and mass-spectroscopic methods. An explicit trend is to create automatic devices by combining the standard electronic, magnetic, semiconductor, and dielectric contactless components. The research into new types of components based on utilization of the Hall effect, galvanomagnetic effect, superconductivity phenomenon, etc., should be continued. The principal trend in developing the final-control elements has been toward high-power controlled ionic devices,

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Major Trends in Development of the Theory and Construction Principles of . . . .

saturation choke coils, and control-clutch mechanisms. Pneumatic-hydraulic automatic-control devices have had and will have a great importance. Other important objectives are: (a) standardization of automatic and telemechanic supervision schemes and (b) finding criteria for evaluating the components and complete systems.

G.V.S.

Card 4/4

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

SOTSKOV, B. S. (Prof.)

"Most Important Trends in the Development of the Theory and Principles of the Construction of the Elements of Automatics,"

paper read at the Session of the Acad. Sci. USSR, on Scientific Problems of Automatic Production, 15-20 October 1956.
Avtomatika i telemekhanika, No. 2, p. 182-192, 1957.

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

Sotskov, B.S.

28-3-5/33

AUTHOR: Sotskov, B.S., Professor, Doctor of Technical Sciences

TITLE: To the Problem of Standardization of Relays (K voprosu o standartizatsii rele)

PERIODICAL: Standartizatsiya, 1957, # 3, May-June, p 26-31 (USSR)

ABSTRACT: General principles of standardization of relays are treated, with the electro-magnetic relays chosen for detailed consideration. The electro-magnetic relays are subdivided into groups in accordance with their purpose - for checking electrical parameters (current or voltage), for amplifying electric impulses and for commutation - and are considered separately as to the choice of mechanical design and electrical conditions, with derivation of equations for calculation of values. It is said that the number of types and variations of relays in general has unduly increased; there are more than 300 types and modifications for one single electro-magnetic relay for control of electric circuits. Some of these are duplications and are expensively produced in small quantities of 100-500 units yearly.

ASSOCIATION: Institute for Automation and Telemechanics of the Academy of Sciences of USSR (Institut avtomatiki i telemekhaniki AN SSSR)

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

PA - 2560

AUTHOR SOTSKOV B.S. (Moskau)

TITLE On criteria for estimation of electro-magnetic relays. (O kriteriyakh dlya otsenki elektromagnitnykh rele.- Russian)

PERIODICAL Avtomatika i Telemekhanika 1957, Vol 18, Nr 3, pp 256 - 261 (U.S.S.R.)

Received: 4/1957 Reviewed: 6/1957

ABSTRACT A method os shown how to determine the essential properties of an electro-magnetic relay in order, according to given working conditions, to select a rational relay. First the formula for the general number k_o which characterizes the properties of the executing and the receiving relay part is derived. Besides this important index the following are of importance for evaluation of the relay:

1. The dependability k_n of the relay,
2. the weight and size of the relay,
3. the parameters of response and switching off,
4. the dependence of these parameters on various factors as well as orientation of the relay axis in space, temperature modification of the surroundings, modification of relative moisture and acceleration,
5. the strength of the relay determined by thermal, electrical, mechanical and chemical strength,

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On criteria for estimation of electro-magnetic relays.

6. Time-characteristics: the time constants of the relay on the occasion of response and switching-off, the time of response and the time of switching-off.
7. The limiting values for the receiving parts of the relay, for instance permissible limiting output which is led to the receiving part.
8. The limiting values for the executing organs (relay contacts): the utmost permissble commutating output within the circuit of the contacts corresponding to the conditions for forming a stable arc, the utmost permissible current in the circuit of the contacts in the case of closed contacts and the utmost permissible voltage in the circuit of the contacts according to conditions prevailing for breakdowns of the intercontact space. Output and voltage depend upon gas pressure of the medium. (2 citations from Slav Publications)

ASSOCIATION: not given.
PRESENTED BY: -
SUBMITTED: 6.8. 1956
AVAILABLE: Library of Congress.

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

SOTSKOV, B.S., red.; BRONSHTEYN, E.L., red.; VORONIN, K.P., tekhn. red.

[Manual on elements of automatic and remote control; electromagnetic relays] Spravochnik po elementam avtomatiki i telemekhaniki; elektromagnitnye rele. Moskva, Gos. energ. izd-vo, 1958. 285 p. [Supplement] Prilozhenie, 1958. 23 p. (MIRA 11:12)

1. Akademiya nauk SSSR. Institut avtomatiki i telemekhaniki.
(Electric relays)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

ZVORYKIN, Anatoliy Alekseyevich, doktor ekon.nauk, prof.; SOTSKOV, B.S., doktor tekhn.nauk, nauchnyy red.; FAIALEYEVA, T.F., red.; TROFIMOV, A.V., tekhn.red.

[Automation of production and its economic efficiency] Avtomatizatsiia proizvodstva i ee ekonomicheskaia effektivnost'. Moskva, Izd-vo "Znanie," 1958. 62 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii. Ser.3, no. 9/10) (MIRA 11:6)

(Automation)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

SHUMILOVSKIY, Nikolay Nikolayevich, prof., doktor tekhn.nauk; MEL'TTSER, Lel' Vladimirovich, kand.tekhn.nauk; ANTIK, I.V., red.; VESHNEVSKIY, S.N., red.; KULEBAKIN, V.S., red.; SMIRNOV, A.D., red.; SOTSKOV, B.S., red.; STEFANI, Ye.P., red.; IORDAN, G.G., red.; BORUNOV, N.I., tekhn.red.

[Using nuclear radiation in units for automatic control of industrial processes] Primenenie iadernykh izluchenii v ustroistvakh avtomaticheskogo kontrolia tekhnologicheskikh protsessov. Moskva, Gos.energ.izd-vo, 1958. 95 p. (Biblioteka po avtomatike, no.1)
(Automatic control) (Radioisotopes--Industrial applications)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

SOTSKOV, B.S.

9(2) 28(1) PHASE I BOOK EXPLOITATION SOV/1434

Akademiya nauk SSSR. Institut avtomatiki i telemekhaniki

Spravochnik po elementam avtomatiki i telemekhaniki; elektromagnitnyye rele (Manual on Components of Automatic Control and Telemechanics; Electromagnetic Relays) Moscow, Gosenergizdat, 1958. 285 p. 15,000 copies printed.

Ed.; (Title page): B. S. Sotskov, (Inside book): Bronshteyn, E. L.; Tech. Ed.: Voronin, K.P.

PURPOSE: This manual is intended for engineers and technicians engaged in the design, manufacture and operation of electromagnetic relays.

COVERAGE: This manual describes electromagnetic relays used in control, signaling and communications. It is based on official government manuals, catalogs and specifications and on the technical documentation of various plants. The manual also provides recommendations on the selection and design of relays and includes summary tables for d-c and a-c relays, and polarized and neutral-polarized relays (these incorporate both magnetic systems: polarized

Card 1/4

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Manual on Components of Automatic Control (Cont.) SOV/1434

and neutral). It also lists various modifications of relays. The authors draw attention to the recent standardization of nomenclature and code numbers, especially as it applies to the new coding in the "Krasnaya Zarya" and VEF plants. Conversion tables are included, listing the old and new code numbers. The manual was compiled by I.Ye. Dekabrun and N.R. Teder under the supervision of B. S. Sotskov. The alphabetical index of relays, indicated in the Table of Contents, is appended as a separate supplement. There are 15 references, of which 13 are Soviet and 2 English.

TABLE OF CONTENTS:

Card 2/4

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

SOTSKOV, B.S

24-58-3-37/38

AUTHOR: Solomonov, M.

TITLE: Role and Importance of Magnetic Elements. Some Findings of the All-Union Conference on Magnetic Elements in Automation, Telemechanics and Computer Engineering (Rol' i znacheniye magnitnykh elementov. Nekotoryye itogi vsesoyuznogo soveshchaniya po magnitnym elementam avtomatiki, telemekhaniki i vychislitel'noy tekhniki)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Tekhnicheskikh Nauk, 1958, Nr 3, pp 174-175 (USSR)

ABSTRACT: This conference was convened by the Institut avtomatiki i telemekhaniki Akademii nauk SSSR (Institute of Automatics and Telemechanics, Academy of Sciences USSR) and the Komissiya po magnitnym usilitelyam i beskontaktnym magnitnym elementam (Commission on Magnetic Amplifiers and Contactless Magnetic Devices). It was held on Nov. 20-30, 1957 with the participation of 800 delegates, representing 240 research and industrial organisations. In the plenary meetings the following papers were read: B. S. Sotskov on "Present state and problems of developing magnetic elements for automation and telemechanics"; K. M. Polivanov on "Dynamic characteristics of elements of electric circuits"; R. V. Telesnin "The influence of magnetic viscosity on the process of remagnetization of cores"; M. A.

Card 1/3

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

24-58-3-37/38

Role and Importance of Magnetic Elements. Some Findings of the All-Union Conference on Magnetic Elements in Automation, Telemechanics and Computer Engineering.

Rozenblat on "Certain factors influencing the static and dynamic characteristics of toroidal cores"; E. T. Chernyshev, N. G. Chernysheva and E. N. Chedurina on "Present state of the problem of testing magnetic materials in dynamic regimes"; M. A. Rozenblat and O. A. Sedykh on "Fundamental principles of constructing (type) series of toroidal cores for magnetic amplifiers and contactless magnetic elements". A number of papers were read in two sections (magnetic amplifiers and discrete magnetic elements). Altogether 80 papers and communications were presented. These showed that in recent years successful results were obtained in the Soviet Union in the field of theory, development and application of various types of magnetic elements to automation, telemechanization and computer engineering. Application of magnetic elements brings about a considerable improvement in reliability and simplifies the design and operation of equipment. Depending on the type of the apparatus, use of static magnetic elements instead of electronic tubes, relays, amplidynes,

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24-58-3-37/38

Role and Importance of Magnetic Elements. Some Findings of the All-Union Conference on Magnetic Elements in Automation, Telemechanics and Computer Engineering.

etc. results in an increase in efficiency, reduction of dimensions, increased speed of response, a reduced power consumption, an increase in sensitivity and a reduction in the costs of apparatus and various other advantages. Simultaneous utilization of magnetic amplifiers and semiconductors will enable the solution of complicated technical problems and opens up wide prospects for further improvement of apparatus used in automation, remote control, computer and communication engineering.

Card 3/3

1. Telemechanics and Computer Engineers--Conference--USSR

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SOTSKOV, B. S.

8(2) PHASE I BOOK EXPLOITATION SOV/1855

Soveshchaniye po elektricheskim kontaktam. Moscow. 1956.

Elektricheskiye kontakty; trudy soveshchaniya (Electrical Contacts; Transactions of the Conference) Moscow, Gosenergoizdat, 1958. 303 p. 4,150 copies printed.

Editorial board: B.S. Sotskov (Resp. Ed.), V.V. Usov, R.S. Kuznetsov, I.Ye. Dekabrun, and Z.S. Kirillova; Ed.: I.Ye. Dekabrun; Tech. Ed.: K.P. Voronin.

PURPOSE: This collection of articles is intended for engineers and technicians designing, developing and operating electrical apparatus and is concerned with electric contact materials. It may also be useful in scientific research institutes and laboratories.

COVERAGE: This book comprises reports delivered at the Electric Contacts Conference held in Moscow in November, 1956. These papers cover physical processes occurring during connecting or disconnecting, methods of designing and testing electric contacts, production and characteristics of contact materials. During this conference of the Institut avtomatiki telemekhaniki AN SSSR (Institute of Automation and Telemechanics, Academy of Sciences, USSR) participants approved periodic conferences of physicists, metallurgists, chemists and apparatus design specialists to discuss problems of electric contacts, which are the components of electric apparatus primarily influencing the reliability of electric systems, especially d-c control systems. Their physical, thermal, mechanical and chemical processes have still not been well analyzed. References are given at the end of most of the reports.

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

KOLOSOV, Sergey Petrovich; SOTSKOV, B.S., prof., doktor tekhn. nauk, retsenzent; KRASOVSKIY, A.A., prof., doktor tekhn. nauk, retsenzent; INOZEMTSEV, S.P., dots., kand. tekhn. nauk, red.; LOSEVA, G.F., red. izd-va; ROZHIN, V.P., tekhn. red.

[Elements of automatic equipment for aviation] Elementy aviatsionnykh avtomaticheskikh ustroistv. Moskva, Gos. izd-vo obor. promyshl., 1958. 382 p. (MIRA 11:9)

(Airplanes—Equipment and supplies)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

28-58-3-4/39

AUTHOR: Sotskov, B.S., Professor Doctor of Technical Sciences

TITLE: The Fundamental Characteristics and Parameters of Continuous-Conversion Elements (Osnovnyye kharakteristiki i parametry elementov s nepreryvnym preobrazovaniyem)

PERIODICAL: Standartizatsiya, 1958, Nr 3, pp 17-20 (USSR)

ABSTRACT: The author suggests a system of characteristics and parameters for elements of automatic and remote-control devices such as transducers, amplifiers, servo-mechanisms, etc., used in various automatic control arrangements. The considered characteristics are necessary for a correct selection of transducers or other automatic control elements in the designing of automatic control systems and is important for their standardization. There are 6 figures.

ASSOCIATION: Institut avtomatiki i telemekhaniki AN SSSR (Institute of Automatics and Telemechanics of the AS USSR)

Card 1/1 1. Control systems--Standards

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

SOTSKOV, B.S., prof., doktor tekhn.nauk, otvetstvennyy red.; POLESITSKAYA, S.M., tekhn.red.

[Terminology of electric relays] Terminologiia rele. Moskva, 1958. 42 p. (Sborniki rekomenduemykh terminov, no.49) (MIRA 11:5)

1. Akademiya nauk SSSR. Komitet tekhnicheskoy terminologii. (Electric relays)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

AUTHOR: Sotskov, B. S. (Moscow) SOV/103-19-9-4/11

TITLE: On the Problems of Dimensions of Electromagnetic Elements (K voprosu o gabaritakh elektromagnitnykh elementov)

PERIODICAL: Avtomatika i telemekhanika, 1958, Vol 19, Nr 9, pp 849-854 (USSR)

ABSTRACT: Here the fundamental relations between the operating capability of an electromagnetic system and the magnetic, electrical, and thermal parameters and its life is given. It is shown that the main parameter characterizing the properties of an electromagnetic system, i.e. the capacity of the system, is dependent on the three conductivities - the magnetic, the electric, and the heat conductivity. For reducing the dimensions at a given P (power) or A_e (capacity of the magnetic system) it is essential to raise the permissible warming of the winding. The coil form must be made from temperature-proof materials. Not only materials with suitable limiting temperatures (sufficient thermal loading capacity) must be selected but also harmonizing temperature coefficients for the linear extension of the coil form, of the wire, and of the varnish by which the windings are covered. For the life of the insulation formula (15) is derived.

Card 1/2

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On the Problems of Dimensions of Electromagnetic Elements

There are 1 figure and 3 references, 2 of which are Soviet.

SUBMITTED: October 28, 1957

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

28(1)
AUTHOR: Sotskov, B. S. (Moskow)

SOV/103-19-12-5/9

TITLE: On the Problem of Lamps Reservation (K voprosu o rezervirovanii lamp)

PERIODICAL: Avtomatika i telemekhanika, 1958, Vol 19, Nr 12, pp 1126 - 1128 (USSR)

ABSTRACT: This is an investigation of the banked connection of two illumination or signal lamps by which it is intended to increase their reliable operation. It is assumed that the surface luminosity remains constant independent of the fact, whether one or two lamps are burning. The requirements placed upon the lamp supply regimen are investigated. The method of lamp reservation investigated is based upon direct banking. This includes the determination of the required voltage values and of the bias resistance, under the condition that if one lamp fails the optical or emission characteristics of the lamps remain unchanged. This method of computing the supply voltage and the bias resistance is also applicable to a banked connection of vacuum tubes. Finally a method is

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advanced of estimating the possible straying of lifetime in such apparatus.
There are 6 figures.

SUBMITTED: February 11, 1958

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

DEKABRUN, I.Ye.; TEDER, N.R.; SOTSKOV, B.S., red.; TIMOKHINA, V.I., red.; VORONIN, K.P., tekhn.red.

[Manual on elements of automatic and remote control systems; electromagnetic contactors and magnetic starters] Spravochnik po elementam avtomatiki i telemekhaniki; elektromagnitnye kontaktory i magnitnye puskateli. Sost.: I.E.Dekabrun, N.R. Teder. Pod red. B.S.Sotskova. Moskva, Gos.energ.izd-vo, 1959. 135 p. [Supplement to the "Manual on elements of automatic and remote control systems; electromagnetic contactors and magnetic starters."] Prilozhenie k Spravochniku po elementam avtomatiki i telemekhaniki; elektromagnitnye kontaktory i magnitnye puskateli. Gosenergoizdat. 21 p. (MIRA 12:6)

1. Akademiya nauk SSSR. Institut avtomatiki i telemekhaniki.
(Electric contactors) (Electric motors--Starting devices)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

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25(1) PHASE I BOOK EXPLOITATION SOV/2380

Akademiya nauk SSSR. Komissiya po tekhnologii mashinostroyeniya

Avtomatizatsiya mashinostroitel'nykh protsessov. t. III: Privod i upravleniye rabochimi mashinami (Automation of Machine-building Processes. Vol3: Drives and Control Systems for Process Machinery) Moscow, Izd-vo AN SSSR, 1959. 370 p. Errata slip inserted. 5,000 copies printed.

Ed.: V.I. Dikushin, Academician; Ed. of Publishing House: D.M. Ioffe; Tech. Ed.: I.P. Kuz'min.

PURPOSE: This book is intended for engineers dealing with automation of various machine-building processes.

COVERAGE: This is the second volume of transactions of the second Conference on Overall Mechanization and Automation of Manufacturing Processes held September 25-29, 1956. The present volume consists of three parts, the first dealing with automation of engineering measuring methods. The subjects discussed include automatic control of dimensions of machined parts, inspection methods for automatic production lines, in-process inspection devices, application of electronics in automating linear measuring processes, and machines for automatic inspection of bearing races. The second part deals with automatic drives and control systems for process machinery, including application of digital computers in the control of metal-cutting machine tools, reliability of relay systems, application of gas-tube frequency converters in the control of induction motor speeds, magnetic amplifiers and their use in automatic systems, hydraulic drives, and ultrasonic vibrators. Part three deals with mechanisms of automatic machines and automatic production lines. The subjects discussed include linkage, indexing, and Geneva-wheel-type mechanisms, friction drives, automatic loading devices, diaphragm-type pneumatic drives, various auxiliary devices for automatic production lines, and methods of design and accuracy of cams. No personalities are mentioned. There are no references.

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

28(5) SOV/28-59-12-4/27

AUTHOR: Sotskov, B.S.

TITLE: The Classification and Unification of Automation Means

PERIODICAL: Standartizatsiya, 1959, Nr 12, pp 16-27 (USSR)

ABSTRACT: A commission of the Gosudarstvennyy nauchno-tekhnicheskiy komitet SSSR po priboram avtomaticheskogo upravleniya obshchepromyshlennogo naznacheniya (USSR State Science-Technical Committee for Automatic Control Instruments of General Industrial Use) has developed a classification project for various means of automation. The article contains detailed information on the project and includes a chart illustrating the general classification principles. Various tables show the verbal and digital designations used for mechanical, acoustical, optical, electrical, nuclear, etc. instruments and their sensitive elements. There are 6 tables.

Card 1/1

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

IL'IN, Viktor Aleksandrovich; KUZNETSOV, N.A., red.; ANTIK, I.V., red.; VESHENEVSKIY, S.I., red.; KULEBAKIN, V.S., red.; SMIRNOV, A.D., red.; SOTSKOV, B.S., red.; STEFANI, Ye.P., red.; SHUMILOVSKIY, N.N., red.; LARIONOV, G.Ye., tekhn.red.

[Remote-control systems for widely-separated objects] Sistemy telemekhaniki dlia rassredotochennykh ob"ektov. Moskva, Gos. energ.izd-vo, 1960. 110 p. (Biblioteka po avtomatike, no.15). (MIRA 14:3)

(Remote control)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

VOLOSNIKOV, Vladimir Petrovich; SIROTIN, A.A., kand.tekhn.nauk, red.; ANTIK, I.V., red.; VESHNEVSKIY, S.I., red.; KULEBAKIN, V.S., red.; SMIRNOV, A.D., red.; SOTSKOV, L.S., red.; STEFANI, Ye.P., red.; SHUMILOVSKIY, N.N., red.; BORUNOV, N.I., tekhn.red.

[Use of computers for automating electric drives] Ispol'zovanie vychislitel'nykh mashin dlia avtomatizatsii elektroprivodov. Moskva, Gos.energ.izd-vo, 1960. 119 p. (Biblioteka po avtomatike, no.17). (MIRA 14:3)

(Automatic control) (Electronic calculating machines)
(Electric driving)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

DEKABRUN, Irina Yevgen'yevna; TEDER, Nina Rudol'fovna; SOTSKOV, B.S., red.; TIMOKHINA, V.I., red.; BOKUNOV, N.I., tekhn.red.

[Handbook on automatic and remote control elements; time relays, programming devices, counting relays, and searchers] Spravochnik po elementam avtomatiki i telemekhaniki; rele vremeni, programmnye ustroistva, rele scheta, iskateli. Sost. I.E.Dekabrun i N.R.Teder. Pod red. B.S.Sotskova. Moskva, Gos.energ. izd-vo, 1960. 136 p. (MIRA 13:7)

1. Akademiya nauk SSSR. Institut avtomatiki i telemekhaniki.
(Automatic control) (Remote control)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

BONDARENKO, Prokofiy Stepanovich; BYCHKOV, V.P., red.; ANTIK, I.V., red.; VESHNEVSKIY, S.P., red.; KULEBAKIN, V.S., red.; SMIRNOV, A.D., red.; SOTSKOV, B.S., red.; STEFANI, Ye.P., red.; SHUMILOVSKIY, N.N., red.; BYCHKOV, V.P., red.; VORONIN, K.P., tekhn.red.

[Automatic control of blast-furnace processes by means of computers] Avtomatizatsiia protsessov domennogo proizvodstva s primeneniem schetno-reshaiushchikh ustroistv. Moskva, Gos. energ.izd-vo, 1960. 143 p. (Biblioteka po avtomatike, no.20) (MIRA 14:3)

(Blast furnaces) (Automation)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

SOTSKOV, B.S., otv.red.; USOV, V.V., red.; KUZNETSOV, R.S., red.; ZOLOTYKH, B.N., red.; DEKABRUN, I.Ye., red.; KIRILLOVA, Z.S., red.; VORONIN, K.P., tekhn.red.

[Electrical contacts; transactions of the All-Union Conference on Electrical Contacts and Materials for them] Elektricheskie kontakty. Trudy Vsesoiuznogo soveshchaniia po elektricheskim kontaktam i kontaktnym materialam. Red.kollegiia: B.S.Sotskov i dr. Moskva, Gos.energ.izd-vo, 1960. 423 p. (MIRA 13:10)

1. Vsesoyuznoye soveshchaniye po elektricheskim kontaktam i kontaktnym materialam. 2d, Moscow, 1959.
(Electric contactors)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

SOTSKOV, B.S., doktor tekhn.nauk, prof.; VOROB'YEVA, T.M.; kand.tekhn. nauk; CHUDNOVSKIY, A.F., doktor fiz.-mat.nauk, prof.; KAGANOV, M.A., kand.fiz.-mat.nauk.

Review of I.F.Volshin, A.S.Kasperovich, and A.G.Shashkov's book "Semiconductor thermistors." Inzh.-fiz.zhur. no.1:124-126 Ja '60. (MIRA 13:4)

(Thermistors) (Voloshin, I.F.)
(Kasperovich, A.S.) (Shashkov, A.G.)

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

BABAKOV, N.A.; BRON, O.B.; KORITSKIY, A.V.; SAKHAROV, P.V.; SOTSKOV, B.S.; STUPEL', F.A.; TSYPKIN, Ya.Z.

Seventieth anniversary of the birth of professor B.F.Vashura. Elektrichestvo no.9:96 S '60. (MIRA 13:10)
(Vashura, Boris Fedorovich, 1890-)

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

S/103/60/021/05/10/013
B007/B011

AUTHORS: Sotskov, B. S., Rostkovskaya, S. Ye. (Moscow)

TITLE: Reliability Characteristics of Resistors and Capacitors

PERIODICAL: Avtomatika i telemekhanika, 1960, Vol. 21, No. 5, pp. 633 - 638

TEXT: In the paper under review the authors study the methods of representing the reliability characteristics of resistors and condensors as dependent on the ambient temperature and the dissipated power or the voltage applied. The formula for the desired characteristic $c/c_N = f(\vartheta_{Ox}, P_x)$ for resistors is derived, and is diagrammatically shown in Fig. 2. c is the reliability factor, c_N is the c-value with rated load P_N and admissible temperature $\vartheta_{Ox} = \vartheta_{ON}$; ϑ_x is the heating temperature of the resistor; ϑ_{Ox} is the ambient temperature; P_x is the power dissipated in the electric resistor, R_t is the heat resistance on heat dissipation from the surface to the ambient. ϑ_{ON} corresponds to the maximum

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temperature admissible with the rated load $P_x = P_N$. Fig. 3 shows the function $P_x = f(\Theta_x)$. The curves shown in Fig. 2 hold for one type of resistor. A table supplies data for the main types of constant carbon resistors. A formula is derived for the determination of the rated output. It may be seen therefrom that it changes somewhat in dependence on the gas pressure and the values of $\Theta_N = \Theta_{x\ max} - \Theta_N$. In the case of capacitors, one must take account of both the influence of temperature and that of voltage when determining the reliability of finished products. Formula (6) is derived, and the capacitor characteristics determined from this formula are shown in Fig. 5. They express the relation between the service life T_x and the admissible values of voltage U_x and temperature Θ_x. There are 5 figures and 1 table.

SUBMITTED: August 7, 1959

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

SOTSKOV, B.S., otv. red. toma; POLYAKOVA, T.V., tekhn. red.

[Proceedings of the 1st International Congress of the International Federation of Automatic Control, Moscow, 1960] Trudy I Mezhdunarodnogo Kongressa Mezhdunarodnoi federatsii po avtomaticheskomu upravleniiu. Moskva, Izd-vo Akad. nauk SSSR. Vol.4.[Equipment for automatic control] Tekhnicheskie sredstva avtomatiki. 1961. 895 p.
(MIRA 14:8)

1. International Federation of Automatic Control, 1st International Congress, Moscow, 1960. 2. Chlen-korrespondent AN SSSR (for Sotskov)
(Automatic control)

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

TRAPEZNIKOV, V.A., akademik, glav. red.; AYZERMAN, M.A., doktor tekhn. nauk, red.; AGEYKIN, D.I., kand. tekhn. nauk, red.; ARTOBOLEVSKIY, I.I., akademik, red.; BATRACHENKO, L.P., inzh., red.; VORONOV, A.A., doktor tekhn. nauk, red.; GAVRILOV, M.A., doktor tekhn. nauk, red.; DIDUSHIN, V.I., akademik, red.; KARIBSKIY, V.V., kand. tekhn. nauk, red.; KOGAN, B.Ya., kand. tekhn. nauk, red.; KRASIVSKIY, S.P., red.; KULEBAKIN, V.S., akademik, red.; LERNER, A.Ya., doktor tekhn. nauk, red.; LETOV, A.M., kand. tekhn. nauk, red.; MEYEROV, M.V., doktor tekhn. nauk, red.; PETROV, B.N., akademik, red.; PUGACHEV, V.S., doktor tekhn. nauk, red.; SOTSKOV, B.S., red.; STEFANI, Ye.M., kand. tekhn. nauk, red.; KHRAMOY, A.V., kand. tekhn. nauk, red.; TSYPKIN, Ya.Z., doktor tekhn. nauk, prof., red.; CHELYUSTKIN, A.O., kand. tekhn. nauk, red.; CHILIKIN, M.G., doktor tekhn. nauk, red.; NAUMOV, B.N., kand. tekhn. nauk, red.; KASHINA, P.S., tekhn. red.

[Transactions of the International Federation of Automatic Control, 1st International Congress, Moscow, 1960] Trudy I Mezhdunarodnogo kongressa Mezhdunarodnoi federatsii po avtomaticheskomu upravleniiu. Moskva, Izd-vo Akad. nauk SSSR. Vol.2. [Theory of discrete systems, optimal systems, and adaptive automatic control systems] Teoriia diskretnykh, optimal'nykh i samonastraivaiushchikhsia sistem. 1961. 996 p. (MIRA 14:9)

1. International Federation of Automatic Control, 1st International Congress, Moscow, 1960. 2. Chlen-korrespondent AN SSSR (for Sotskov) (Automatic control)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

PETROV, B.N.; SOTSKOV, B.S.; LARIONOV, A.N.; CHILIKIN, M.G.; SYROMYATNIKOV, I.A.; BLAGONRAVOV, A.A.; KRUZHILIN, G.N.; IVAKHNENKO, A.G.; NAGORSKIY, V.D.; CHELYUSTKIN, A.B.; DROZDOV, N.G.; PETROV, I.I.

Seventieth birthday of Viktor Sergeevich Kulebakin. Elektrichestvo no.10:90-91 O '61. (MIRA 14:10)
(Kulebakin, Viktor Sergeevich, 1891-)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

PANASENKO, Valeriy Dmitriyevich; SOTSKOV, B.S., prof., retsenzent; GAL'PERIN, I.TS., doktor tekhn. nauk, nauchnyy red.; ODEROV, I.A., red.; GARNUKHINA, L.A., tekhn. red.

[Elements of automatic control and computer engineering; a manual on standard components and networks]Elementy avtomaticheskikh ustroistv i vychislitel'noi tekhniki; spravochnik po tipovym elementam i skhemam. Izd.2., dop. i perer. Moskva, Oborongiz, 1962. 300 p. (MIRA 15:10)

1. Chlen-korrespondent Akademii nauk SSSR (for Sotskov).
(Automatic control) (Electronic calculating machines)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

ORSHANSKIY, D.L., gl.red. ARUTYUNOV, K.B., red.; VORONOV, A.A., red.; KARANDEYEV, K.B., red.; KARIBSKIY, V.V., red.; KRASIVSKIY, S.P., red.; KULEBAKIN, V.S., red.; LOGINOV, L.I., red.; LUKIN, V.I., red.; MALOV, V.S., red.; PAVLENKO, V.A., red.; PETROV, B.N., red.; RAKOVSKIY, M.Ye., red.; SMAGLY, L.V., red.; SMIRNOV, A.D., red.; SOTSKOV, B.S., red.; STEFANI, Ye.P., red.; TRAPEZNIKOV, V.A., red.; TSAREVSKIY, Ye.N., red.; LEONOVA, Ye.I., tekhn. red.

[EIKA; encyclopedia of measurements, control and automation]EIKA; entsiklopediia izmerenii kontrolia i avtomatizatsii. Moskva, Gosenergoizdat. No.1. 1962. 243 p. (MIRA 16:3)

(Instruments) (Automation) (Mensuration)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

BALAGUROV, Vladimir Aleksandrovich; GALTEYEV, Fedor Fedorovich; GORDON, Andrey Vladimirovich; LARIONOV, Andrey Nikolayevich; SOTSKOV, B.S., retsenzent; SENKEVICH, A.M., kand. tekhn. nauk., red.; MOROZOVA, P.B., red. izd-va; ROZHIN, V.P., tekhn. red.

[Design of electric devices for aircraft electric equipment]Proektirovanie elektricheskikh apparatov aviatsionnogo elektrooborudovaniia. [By] V.A.Balagurov i dr. Pod red. A.N.Larionova. Moskva, Oborongiz, 1962. 515 p. (MIRA 15:10)

1. Chlen-korrespondent Akademii nauk SSSR (for Larionov, Sotskov).
(Airplanes--Electric equipment)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

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3

SOTSKOV, B.S.

33448
S/119/62/000/001/001/011
D201/D302

9,6000 (1040, 1139, 1159)

AUTHORS: Grishin, A.I., Kavalerov, G.I., Nize, V.E., Orshanskiy D.L., Pavlenko, V.A., Sotskov, B.S., and Yurkevich, A.P.

TITLE: Recent trends in the development of instrumentation

SOURCE: Priborostroyeniye, no. 1, 1962, 1 - 5

TEXT: A survey of recent trends in the development of instrumentation within the Soviet-bloc is given. The main objective is the standardization of instruments with the aim of simplifying the automation of industrial processes. A group of new temperature gauges is based on the dependence of gas viscosity on temperature. Another class of gauges is based on the temperature change of a plate resistance, in conjunction with a compensating plate and an electromagnetic circuit. Efforts are made to utilize the Austin effect. For high temperature operation (above 2000°C), graphite p-n junction thermocouples have been developed. New flow gauges have been produced for the petroleum industry. Several interchangeable high-

Card 1/4

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D201/D302

Recent trends in the development ...

accuracy feed-back devices have been developed for measuring various parameters such as pressure and vacuum gauges, strain gages, thermometers and density meters. Nuclear resonance methods are being developed for contactless flow measurement. Ultrasonic and radio-interference methods are used for level measurements and recordings. All new types of instruments are incorporated in new automatic control systems, developed around them. In 1961, 400 types of electrical measuring instruments were in production, varying from laboratory standards to high power distributing panel instruments. High sensitivity miniature meters are under development (1 - 2 cm^3 volume, 5 - 10 microcamps range). The accuracy of portable instruments is being improved and their dimensions are reduced. Digital instruments, both of continuous action and sampled data types continue to find more and more applications. As far as analytical instruments are concerned, the main trend is to increase the number of methods of analysis applicable in practice, to increase the discriminating properties, sensitivity and speed of operation, to standardize the electrical output, to develop analytical instruments suitable for automatic control processes, to develop automatic and

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Recent trends in the development ...

semi-automatic instruments. Those of interest are stated to be the newly developed series of standardized galvanic gas analyzers based on the micro-concentration of oxygen. Another method has been used in developing a spectrophotometric gas analyzer, with a sensitivity 10 times greater than that of the basic instrument; the instruments have ranges from 0 - 1.0 % volume of nitrogen in argon and 0 - 0.5% volume of nitrogen in helium. The range of gas analyzers based on infra-red absorption has been increased by several new instruments. Mention is made of a new instrument calibrated in 0 - 0.05 % CO_2, with output adapted to an automatic control system. New types of mass-spectrometers have been developed, with mass number ranges 1 to 600 ME, revolution 300 and sensitivity (argon) 0.002 %. All spectrometers are being revised to form a single range of six instruments. A radiospectrometer has been developed for the electron paramagnetic particles: Its production has started. Electrometric methods of liquid analysis and control are under development. Of interest is stated to be an industrial instrument for measuring and controlling HCl concentration in wood pulp with a varying solid to liquid phase. Other types of concentration meters were also develo-

Card 3/4

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D201/D302

Recent trends in the development ...

ped, both for inorganic and organic analysis: Some are based on spectrometry. As far as the computer technique is concerned, three main trends are considered: The use of universal electronic computers for scientific and engineering calculations; the use of computers in economics and for processing large amounts of information; Application of control computers for the control and automatic control of industrial processes. In new computers the existing mercury and CRT delay lines are replaced by magnetic core memories and tubes by transistors. Modular technique is widely used together with micro-miniaturization. A new storage element has been developed based on the effect of stable internal polarization. Another interesting new component is the magnetic triode, consisting of a p-n junction, formed by alloying the intrinsic material with lead and tellurium.

Card 4/4

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37780
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D201/D308

9,6100

AUTHOR: Sotskov, B. S.

TITLE: On the problem of technical and economical estimation of instruments or installations in choosing them for use in automatic control systems

PERIODICAL: Priborostroyeniye, no. 5, 1962, 21-24

TEXT: The author considers a method of evaluating the economy of new replacement installations which is different from the methods previously developed. This method is based on determining the total cost of the instrument or installation operation during its lifetime. It permits a unified approach to the grading at various relationships between the capital expenditure, running costs and output in the variants being compared and makes it also possible to take into account the reliability of the installation. Two cases are discussed in detail: 1) The change-over from one installation to another does not affect the output. 2) The incorporation of a new machinery affects the output. In both cases the total

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On the problem of ...

cost is treated as a function of several variables, expanded into a series, the first three terms of which are taken and the corresponding graphs of total cost against the lifetime of the instrument or installation are plotted for different values of the series constants. The comparison of graphs makes it possible to choose the best possible variant. There are 3 figures.

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

KARIBSKIY, V. V.; SOTSKOV, B. S.

General state system of devices and technical means of automation. Standartizatsiia 26 no.10:3-10 O '62. (MIRA 15:10)

(Automatic control)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

SORIN. Ya.; BRUYEVICH, N.G., akademik; GNEDENKO, B.V., akad.; SIFOROV, V.I.; SOTSKOV, B.S.

Precise, strong and lasting. Znan.-sila 37 no.5:10-16 My '62. (MIRA 15:9)

1. Predsedatel' komiteta Vsesoyuznogo soveta nauchno-tekhnicheskikh obshchestv po nadezhnosti i kontrolyu kachestva (for Sorin). 2. Akademiya nauk Ukrainskoy SSR (for Gnedenko). 3. Chleny korrespondent AN SSSR (for Siforov, Sotskov).
(Quality control)

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VASIL'YEVA, Natal'ya Petrovna; VOROB'YEVA, Tamara Mikhaylovna; SOTSKOV, B.S., otv. red.; POPOV, B.A., red. izd-va; SHEVCHENKO, G.N., tekhn. red.

[Contactless components of automatic control systems] Beskontaktnye elementy avtomatiki. Moskva, Izd-vo Akad. nauk SSSR, 1963. 70 p. (MIRA 16:6)

1. Chlen-korrespondent AN SSSR (for Sotskov).
(Electric relays) (Automatic control)

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KOLOSOV, Sergey Petrovich; SOTSKOV, B.S., retsenzent; SVECHARNIK, D.V., doktor tekhn. nauk, red.; SHEYNFAYN, L.I., red.izd-va; ROZHIN, V.P., tekhn. red.

[Elements of aircraft automatic control systems] Elementy aviatsionnykh avtomaticheskikh ustroistv. Izd.2., perer.i dop. Moskva, Oborongiz, 1963. 462 p. (MIRA 16:4)

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

SOT*SKOV, B. S., KRIVOROTOVA, Ye. S.

"The reliability of a coil of an electromagnetic mechanism"

Report presented at the Seminar on reliability problems [Reliability Section of the Scientific Council on Cybernetics, Presidium AS USSR] 28 Jan - 25 Feb 63

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

SOTSKOV, B. S., DEKABRUN, I. Ye.

"Probability of the correct operation of physical models of electric contacts."

Report present at the Seminar on reliability problems [Reliability Section of the Scientific Council on Cybernetics, Presidium AS USSR] 28 Jan - 25 Feb 63

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652620001-8

SOTSKOV, B. S.; DEKABRUN, I. Ye.

"Reliability Problems for Electromechanical Elements."

Paper to be presented at the IFAC Congress, to be held in Basel, Switzerland, 27 Aug to 4 Sep 63

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AUTHOR: Sotskov, B. S.(Corresponding member of the AS USSR); Karibskiy, V. V.(Candidate of technical sciences)

TITLE: Basic problems in establishing a unified automation system 14 76

SOURCE: AN SSSR. Vestnik, no. 5, 1963, 40-46

TOPIC TAGS: automatic control system, energy parameter, block assembly, module, low-cost computer

ABSTRACT: Coordinated planning of automatic control systems is an integral part in developing the national economy. Careful attention must be paid to the types of machines and computers involved. The actual machines that produce the interaction of energy and matter, the ways in which data are obtained and fed into these machines, and the use of energy in these processes, all must be thoroughly understood. These devices operate without human control. Reducing detail to energy parameters, known as signals, is a complicated process. The parameters of input and output signals emitted by the computers receiving, transmitting, assimilating, and converting data must be standardized, but substituting a single unified control system is less desirable than fusing a variety of unified systems into a total

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whole. Automation systems will be greatly improved by mass producing low-cost designs such as block assemblies and modules and by estimating the time required to make these devices operational. Research should concentrate on comparative analyses of all existing systems of computers, determining the best and most profitable ones, as well as utilizing the latest discoveries in the fields of physics, chemistry, and electronics to develop modern, sophisticated automation systems.

ASSOCIATION: none

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