Some problems ...

S/103/63/024/004/014/014
D201/D308

1) The information obtained from the measuring instrument with independent measurements and with a finite number N of quantization levels of the scale, is a monotonic function of this number N and tends asymptotically to a limit for an even distribution of the measured quantity and for an even and normal disturbance distribution. 2) The maximum amount of information is systems in which the amount of errors introduced at preceding stages is independent of the quantization region, is a function of statistical characteristics of these errors only. 3) For normal magnitudes of the quantization region of (0.5-2) a, where 'a' is a constant, determining the even error distribution, 90 to 75% of maximum possible information can be obtained from the indicating instrument, the mean square value of error being 140 to 240% of its minimum. 4) From the point of view of information indicators, the increase in the number of quantization regions is always useful irrespective of noise (provided this does not increase the amount of noise itself). There are 2 figures.

SUBMITTED: July 9, 1962

Card 2/2

L 41182-65   EWT(d)/EWP(c)/EWP(v)/T/EWP(k)/EWP(l)   Pf-4
ACCESSION NR: AP5004677   S/0115/64/000/009/0058/0059

AUTHOR: none

TITLE: Fourth scientific and technical conference on "Cybernetics for the improvement of measurement and inspection methods"

SOURCE: Izmeritel'naya tekhnika, no. 9, 1964, 58-59

TOPIC TAGS: cybernetics, electric measurement, electric quantity instrument, digital computer, electronic equipment, electric engineering conference

ABSTRACT: The conference was held 1-4 July at the All-Union Scientific Research Institute of Metrology by the Section of Electrical Measurements of the Council on the Problem of "Scientific Instrument Making" of the State Committee on Coordination of Scientific Research Work in the USSR together with the All-Union Scientific Research Institute of Electrical Measurement Instruments and the Leningrad Regional Administration of the Scientific and Technical Division of the Instrument Making Industry. More than 400 delegates from 29 cities of the country participated. Fifty-seven reports were heard and discussed. Reports were given by: P. V. NOVITSKIY (Leningrad)--"Definition of the Concept of Informational Error in Measurement and its Importance in Practical Use" and "On the Problem of the Average Informational Criterion of Accuracy Throughout the Entire Scale of an Instrument"; Ya. A.
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L 41182-65
ACCESSION NR: AP5004677   /7

KUPERSHMIDT (Moscow)--"On Determination of the Criteria of Accuracy for Measurement
Devices"; S. M. MANDEL'SHTAM (Leningrad)--report on a new criterion of accuracy of
measurement instruments; P. F. PARSHIN (Leningrad)--report on optimization when
using Fourier transforms on electronic digital computers; S. P. DMITRIYEV, G. Ya.
DOLGINTSEVA and A. A. IGNATOV (Leningrad)--proposal of a new method for solving
problems of optimum filtering for non-stationary random signals and interference;
I. B. CHELPANOV--"Calculation of the Dynamic Characteristics of an Optimum Complex
Two-Channel System which Uses Signals from a Position Meter and from a Speed Meter";
R. A. POLUEKTOV (Leningrad)--"Optimum Periodic Correction in the Measurement of
Continuous Signals"; S. P. ADAMOVICH (Moscow)--"Analysis and Construction of Devices
for Correction of Non-linearity and Scaling for Unitary Codes; G. V. GORELOVA
(Taganrog)--"A Method for Statistical Optimization in Graduating the Scales of
Electrical Measuring Instruments"; M. A. ZEMEL'MAN (Moscow)--"Analog-Digital Voltage
Converter with Automatic Error Correction"; B. N. MALINOVSKIY, V. S. KALENCHUK and
I. A. YANOVICH (Kiev)--"Automatic Monitoring of the Parameters of the Electrical
Signals of Complex Radio and Electronic Equipment"; V. P. PEROV (Moscow)--"Operational
Cybernetics as an Independent Scientific Specialization"; Ye. N. GIL'BO (Leningrad)--
"On the Problem of Effective Non-linear Scales"; A. I. MARKELOV (Moscow)--"Devices
for Preliminary Processing of the Results of Measurements Presented in the Form of.

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.L 41182-65

ACCESSION NR: AP5004677   -20

Graphic Recordings For Subsequent Introduction of the Information into Universal Digital Computers"; O. M. MOGILEVER and S. S. SOKOLOV (Leningrad)--"On a Method for Reducing Excess Information"; T. V. NIKOLAYEVA (Leningrad)--"A Device for Temporal Discretization of Continuous Signals"; A. A. LYOVIN and M. L. BULIS (Moscow)-- "Optimization of the Transmission of Telemetric Information as a Means for Raising the Efficiency and Eliminating Interference"; D. E. GUKOVSKIY (Moscow)--"On a Statistic Approach to the Detection of Events in Automatic Inspection"; M. I. LANIN (Leningrad)--"Method for Calculating the Holding Time of Communications in a Contra- lized Inspection System or Constant Servicing Time"; O. N. BRONSHTEYN, A. L. RAYKIN and V. V. RYKOV (Moscow)--"On a Single-Line Mass Service System with Losses"; V. M. SHLYANDIN (Penza)--report on circuit designs for direct compensation electrical digital measuring instruments; A. N. KOMOV (Novocherkassk)--report on a new method for compensation of digital bridges; M. N. GLAZOV (Leningrad)--report on the problem of voltage-to-angular rotation conversion; V. S. GUTNIKOV (Leningrad)--"Methods for Construction of Frequency Capacitance Pickups with a Linear Scale"; R. Ya. SYROPYATOVA and R. R. KHARCHENKO (Moscow)--report on the determination of the ampli- tude-frequency and phase characteristics of PFM and PTM modulators; Ye. I. TENYAKOV (Novocherkassk)--"The Phototransistor as a Switch for Electrical Measurement Purposes"; N. V. MALYGINA (Leningrad)--a report on ways for making universal equip- ment for measurement of current, voltage and power; P. P. ORNATSKIY and V. I. ZOZULYA (Kiev)--reports on the construction of static voltmeters, wattmeters and

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. L 41182-65

ACCESSION NR: AP5004677   /5

phase meters; A. V. TRIKHANOV, I. G. SMYSHLYAYEV, N. I. SABLIN, V. M. RAZIN and V. A. GORBUNOV (Tomsk)--report on a device for automatic processing of the measurements of vibration amplitude of pneumatic hammers; L. K. RUKINA and V. G. KNORRING (Leningrad) --report on the development of a digital compensator for measuring pressure, force, etc.; N. B. DADUKINA (Leningrad)--report on a method for constructing frequency pickups for gas analysis; Ye. M. KARPOV, V. A. BRAZHNIKOV and B. Ya. LIKHTTSINDER (Kuybyshev)--reports on analysis and recording of boring speeds; Yu. V. PSHENICHNIKOV (Kuybyshev)--"A High Speed Voltage-to-Digital Code Converter for ac Pickups"; G. P. VIKHROV and V. K. ISAYEV (Vilna)--"A Highly Accurate Digital Peak-to-Peak Voltmeter"; and S. M. PERSIN (Leningrad)--"A Low Level Analog-Digital Voltage Converter."

ASSOCIATION: none

SUBMITTED: 00   ENCL: 00   SUB CODE: EE, EC

NO REF SOV: 000   OTHER: 000   JPRS

me
Card 4/4

L 24933-65   EWT(d)/EEC(k)-2/EEC-4/EEC(c)-2/EED-2/FS(b)   Pn-4/Pq-4/Pac-4/
Pae-2
ACCESSION NR: AP4045347   S/0103/64/025/009/1344/1351

AUTHOR: Lanin, M. I. (Leningrad)

TITLE: Evaluation of the methods of establishing connection between the points
of a tele-information system

SOURCE: Avtomatika i telemekhanika, v. 25, no. 9, 1964, 1344-1351

TOPIC TAGS: communication link, telemetering

ABSTRACT: A simplified block diagram (see Enclosure 1) is considered which
comprises a transmitter of information, a receiver of information, and a storage
device; the latter stores the message when the system is busy or when there is no
connection between the transmitter and receiver at the time of the information
arrival. It is assumed that: (1) The source generates a random Poisson flow of
requirements with a parameter λ ; (2) Time τ of processing of any message by
the receiver is constant; (3) On resuming the channel availability, the message

Cord 1/3

L 24933-65

ACCESSION NR: AP4045347

O

is transmitted from the storage to the receiver only so long as it is necessary. Three algorithms of establishing connection between the receiver and the storage are considered: (a) message transmission initiated by the storage device; (b) cyclic request by the receiver; and (c) random request by the receiver. Formulas describing the probability of a structural loss of information are developed for the case of a finite storage capacity, simplest information flow, and constant servicing time. A formula for the average waiting time in an infinite-storage system is also derived. It is proven that, no matter what the finite value of the request time characteristic is, the minimum loss probability and minimum average waiting time cannot be achieved if a random transmission initiated by the sending end takes place. Orig. art. has: 2 figures and 35 formulas.

ASSOCIATION: none

SUBMITTED: 23May63   ENCL: 01

SUB CODE: DP   NO REF SOV: 002   OTHER: 002

Card 2/3

L 24933-65
ACCESSION NR: AP4045347
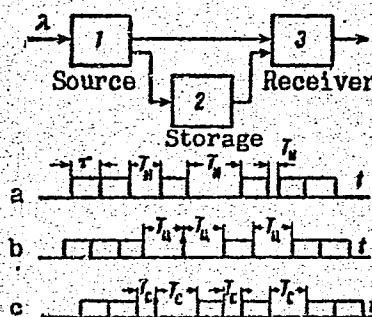
A block diagram of information transmission
    and processing
a - information algorithm
b - program algorithm with a cyclic request
c - program algorithm with a random request

Card 3/3

L   46021-66

ACC NR: AT6012350   SOURCE CODE: UR/0000/66/000/000/0150/0159

AUTHOR: Lanin, M. I.

ORG: none

TITLE: Methods of using redundant information compared

SOURCE: Nauchno-tekhnicheskaya konferentsiya po sredstvam promyshlennoy telemekhaniki. Moscow, 1963. Promyshlennaya telemekhanika (Industrial telemechanics); materialy konferentsii. Moscow, Izd-vo Energiya, 1966, 150-159

TOPIC TAGS: signal noise separation, information theory, teleinformation system

ABSTRACT: Two methods of redundancy utilization — error detection with RQ and error correction — are compared along the lines indicated by W. R. Cowell (IRE Trans., IT-7, July 1961, no. 3). Although an objective comparison would require taking the traffic capacity into account, a simpler analysis of potentialities of both methods is presented: only probabilities of correct reception are compared. It is found that, with a wide range of messages handled by practical teleinformation systems and with a low-to-medium channel noise level, the RQ error-detection method ensures substantially better noise rejection than the error-correction method, the average time of message correction being the same. Orig. art. has: 20 formulas and 1 table.

SUB CODE: 17 / SUBM DATE: 08Jan66 / ORIG REF: 000 / OTH REF: 002

Card 1/1

LANIN, N., kapitan I ranga

Following the dictate of his heart. Za rul. 21 no.1:6-7 Ja '63.
(MIRA 16:1)
(World War, 1939-1945--Personal narratives)

28(2)

AUTHOR: Lanin, N. D., Engineer   SOV/119-59-7-2/18

TITLE: A Pneumatic Computer of Continuous Operation

PERIODICAL: Priborostroyeniye, 1959, Nr 7, pp 3-6, (USSR)

ABSTRACT: At the Scientific Research Institute for Overall Automation (nauchno-issledovatel'skiy institut kompleksnoy avtomatizatsii) a pneumatic computer of continuous operation using pneumatic regulators of the aggregate unit system (AUS) was developed. The machine was designed for the solving of linear differential equations with constant coefficients, and is suited for the application of similarity of automatic regulating systems. Figure 1 shows the principal elements of this computer, which consists essentially of a summator and an integrator, in form of a scheme. The basic mode of operation of these principal elements is discussed, after which the basic scheme of the integrator is dealt with. The latter consists of an aperiodic element, an amplifying element, and of a summation block, and on the basis of figures 3 and 4 the mode of operation of the integrator is discussed. This

Card 1/2   computer PVM-1, the entire wiring scheme of which is shown

A Pneumatic Computer With Continuous Operation   SOV/119-59-7-2/18

in figure 5, is suited for the solution of differential equations of the sixth order. As the computer works with over-pressure, the zero-value is adjusted at 0.5 atm. The experimental machine, which is produced at the TsNIIKA, is shown in figure 7, and in figure 9 the graphical solution, the analytical solution, and the solution obtained by the here described method of a differential equation of the third order are compared, and the maximum error is given as amounting to 2.5%. Finally, it is found that the computer PVM-1 is suited for the control of technological processes and may form the basis   for the development of control machines at industrial plants. There are 9 figures.

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut kompleksnoy avtomatizatsii (Central Scientific Research Institute for Overall Automation)

Card 2/2

LANIN, N.D.

report to be presented at the 1st Intl Congress of the Intl Federation of Automatic Control, 25 Jun-5 Jul 1960, Moscow, USSR.

BUTKOVSKIY, M. L. - "Ultra stability in electronic calculating devices in the solution of nonlinear equations in indefinite form"

CHKALTENKO, A. B. - "Use of calculating devices in systems for the automatic control of rolling mills"

CHUKHANOV, V. V. - "Concerning some problems of the organization of self-adjusting and self-teaching systems of automatic control, based on principles of random search"

DAYDOV, N. I. - "Development of automatic control systems for boiler units"

RUDNICOV, Yu. G. - "Determination of optimum adjustment of industrial automatic regulation systems according to initial data obtained from experience"

DORF, A. I., and ROZENVASSER, E. N. - "Methods of organizing Lyapunov functions in the theory of nonlinear regulating systems"

DRUZHININ, N. N. - "Balanced regulation and inter-communication of a multi-motor electric drive and technology in continuous rolling mills"

FELDBAUM, A. A. - "Problems of statistical theory of automatic optimization systems"

FEDOR, V. I. - "Automation of a reversible cold rolling mill for nonferrous metals"

FILIPPOV, A. F. - "Application of the theory of differential equations with a discontinuous right side to nonlinear problems of automatic regulation"

GAVRILOV, M.A. - "Structural surplus and operational reliability of relay devices"

GANICH, N. N. - "Automation of irrigation systems"

GERGENSKURG, O. K., PUGACHEV, V. S., KRINSKIY, M. P., MKHUN, L. N., and GORT, M. B. - "Power regulation of electric power system"

GINSBURG, S. A. - "Logical method of synthesis of functional converters"

LIVIN, V. A. - "Methods of transmission of information and the structure of telemechanical systems for dispersed structures"

DROGOV, V. L., and LINSKIY (Cm) - "The code-impulse system of tele-measurement for dispatched operations of trunk-line gas pipe lines"

IVAKHNENKO, A.G. - "Concerning the application of the theory of combined regulation systems for cybernetic adaptation systems"

KLABUKOV, L B., and SHPANMAN, B. B. - "A quasi-equilibrated bridge as an element in a system of automatic control"

KHARKEVICH, V. V. - "Concerning the process of extra regulation of inert objects in the presence of disturbance"

KLEIN, I. M. - "Some problems of the theory of statistical linearization and its application"

KLEIN, N. M. - "Some problems of the theory of impulse systems with time selectors"

KRERENSKIY, A. E., BOLDOVTIN, S. V., VOSKOBOYNIKOV, L.N., IOFFE, D. M., POLYAK, B. P., POPOV, E. P., BLATERMAN, Ya. L., GUGIN, A. Ya., and TAUERSON, Va. S. - "The problem of bioelectric control"

KOLOSHKIN, B.T. - "New types of photo resistances and their field of use"

KUPORKO, M. L., MIKHAILOV, B. G., and STRELKOV, K. A. - "System of automatic control and regulation of blast distribution in the figures of blast furnace"

KREDOCHKIN, B. L. - "Investigation of the dynamics of the hydraulic duct of a copying lathe"

KRASOVSKIY, A. A. - "Dynamics of continuous systems of automatic regulation with extra self-adjustment of corrective devices"

KRASOVSKIY, N. N. - "Concerning the selection of parameters of optimum stability systems"

KUHNRENKO, A. I. - "The dynamics of devices imitating living organisms"

KHARLINN, V. S. - "The invariant theory of automatic regulation and control systems"

LANIN, I. D. - "Thematic calculating devices as a means of insuring the reliability of complex automation systems"

LAZAREV, V. Yu, and PIKHICHENKO, P. P. - "Mechanization of processes of analysis and synthesis of the structure of relay devices"

LANIN

LANIN, N.D.

Abramov nauk SSSR. Institut avtomatiki i telemekhaniki. Seminar po pneumoticheskomu avtomatike. 2d and 3d session

Voprosy pnevmo- i gidro- avtomatiki (Problems in Pneumatic and Hydraulic Automation) Moscow, 1960. 211 p. Errata slip inserted. 4,500 copies printed.

Resp. Ed.: M.A. Ayzerman, Doctor of Technical Sciences, Professor; Ed. of Publishing House: A.A. Tal'; Tech. Ed.: S.G. Tikhomirov.

PURPOSE: This collection of articles is intended for scientific workers, industrial designers and engineers interested in automation and telemechanics.

COVERAGE: The collection of 25 articles is a continuation of an earlier work of the Academy of Sciences USSR, on pneumatic and hydraulic automation system, published in 1959. A wide range of problems connected with the design and operation of pneumatic and hydraulic automation equipment is described. An addition to problems based on experiments, the collection also contains discussions of new trends in the field, such as the possibility of ... the German Democratic Republic and in Czechoslovakia and reflect a somewhat different approach to automation problems. No personalities are mentioned. References accompany most of the articles.

MECHANIC AND HYDRAULIC DEVICES AND SYSTEMS OF AUTOMATIC REGULATION

Perepisin, L.I. Pneumatic Compensating Pressure and Rarefication Trans- mitter and the Transmission of Pressure

Anns, R.A., and I.G. Kirilinskiy. Dynamic Characteristics of AUS (Apparatuses multicoverage system. Unifying Assembly System.) Regulators and Recommendations for Their Tuning   68

Volgin, V.V. Direct and Reverse Lead in Automatic Regulation Systems Composed of AUS Pneumatic Instrument   79

Pavarovskiy, V.M. Small Scale Hydraulic Lead Block of Compensation Type   88

Lanin, V.D. Method of Increasing the Amplification of Industrial Hydraulic Instruments   95

Nivaor, V.D. KR-1 Electronic and Hydraulic Regulator   105

Beyrakh, Z.Ya. KCRA (Moderately paced trajectory automatics — Moscow test Automation Plant) Electronic and Pneumatic Regulator   111

Nikitin, V.I. AUS Unified Pneumatic Assembly System — Base of a Complex Automation in the Petroleum Refining Industry   125

MECHANIC CONVEYING-SOLVING AND SCANNING DEVICES

Tsitcher, Yu.I., and I.M. Makbarov. Construction Problem of Pneumatic Computing Solving Devices   132

Lanin, V.D. Small Scale Pneumatic Continuous Action Calculating Machine and the Delay Block   138

Zalmanzon, L.A., and A.T. Sendron. Investigation of Characteristics of PNEUMATIC Chambers Used as Summators   148

Berends, T.K. and A.A. Tal'. Pneumatic Throttleless Relay Diagram (Tazrvaystay, T.K.) Device for the Application of Pneumatic External Regulator of Items With Several Regulating Components   158

Adler, V.R., T.K. Barends, and N.I. Kharash. EKR-1P Regulating Oscillograph With a Pneumatic Output   162

Rubin, V.I., M.L. Kuzibya and Yu.I. Ostrovskiy. Application of an External Regulator for Controlling and Regulating Certain Chemical Processes According to the Thermal Effect of the Reaction

MECHANIC AND HYDRAULIC AUTOMATION DEVICES IN THE GERMAN DEMOCRATIC REPUBLIC AND CZECHOSLOVAKIA

Britell, V. (GDR). Hydraulic and Combined Automatic Regulation Systems   175

Ferner, V. (GDR). Components of Automatic Regulators   180

Hampl, V. (Czechoslovakia). Hydraulic Regulators of the Kladno Plant   205

YURIEUKO Library of Congress (1980.842)

Card 5/5   AC/Dom/grp 1-12-61

28.2000   1013, 1031, 1121   25544

S/123/61/000/011/031/034
A004/A101

AUTHOR: Lanin, N. D.

TITLE: Small-size pneumatic computer of continuous action and lag unit

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 11, 1961, 9, abstract
11Zh74 (V sb. "Vopr. pnevmo- i gidroavtomatiki". Moscow, AN SSSR,
1960, 138-147)

TEXT: The author describes a small-size computer for the solution of
ordinary linear differential equations of the type

$$a_n \frac{d^n P}{dt^n} + a_{n-1} \frac{d^{n-1} P}{dt^{n-1}} + \ldots + a_1 \frac{dP}{dt} + a_o P = P_{disturb.}(t).$$

The computer contains: adder based on the stress compensation principle and
equipped with feedback units in the form of diaphragm chambers; integrating
unit with aperiodic component in the form of a throttle and pneumatic capacity;
differentiating component made on the basis of the AYC (AUS) adder - type 2PБ-25A
(2RB-25A). The author presents three variants of constructing the pneumatic lag
units: as a network of n-identical components; in the form of servo chambers

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Small-size pneumatic computer ... 25544   S/123/61/000/011/031/034
                                                 A004/A101

connected in series, separated by valves which are controlled by the oscillator;
in the form of parallel-connected servo chambers connected by input and output
valves with corresponding collectors.

                                                 B. Yeliseyev

[Abstracter's note: Complete translation]

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32576
S/621/61/000/000/011/014
D234/D303

9,7000 (also 1159)

AUTHORS: Lanin, N.D., and Pashintseva, V.I.

TITLE: Methods of constructing pneumatic computers of conti-
              nuous action and ways of utilizing them

SOURCE: Nauchno-tekhnicheskoye obshchestvo priborostroitel'noy
              promyshlennosti. Primeneniye vychislitel'noy tekhniki
              dlya avtomatizatsii proizvodstva. Trudy soveshchaniya,
              provedennogo v oktyabre 1959 g. Ed. by V.V. Solodovni-
              kov. Moscow, Mashgiz, 1961, 445 - 457

TEXT: The authors give a detailed general description of the main
units of pneumatic computers. The integration bloc consists of a
non-periodical link with positive feedback, in the form of a con-
stant resistance connected in series with a variable capacitance.
Equations of motion of the bloc are discussed. Three variants of
the differentiating bloc are considered and their transfer func-
tions quoted. The most usual kinds of summation bloc utilize the
addition of forces due to input pressures in membrane chambers; the

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Methods of constructing pneumatic ...

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S/621/61/000/000/011/014
D234/D303

authors state that addition of pressures in the chamber between throttles is more economical, and recommend the use of the cascade principle. The coefficient bloc is described. On the basis of the above units, a pneumatic computer was constructed, of which two modifications allow the solution of differential equations of the 6th order and the third modification those of the 9th order. A general diagram of the computer is given. The error in the solution does not exceed 3 %. There are 6 figures and 6 Soviet-bloc references.

Card 2/2

9,7200

29749

S/194/61/000/006/006/077
D201/D302

AUTHOR: Lanin, N.D.

TITLE: A pneumatic continuous action computer and delay
            bloc of small overall dimensions

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika,
            no. 6, 1961, 7, abstract 6 B56 (Vopr. pnevmo-i gid-
            roavtomatiki, M., AN SSSR, 1960, 138-147)

TEXT: A description is given of a pneumatic computer ПВМ-2 (PVM-
2) designed at the Central Scientific and Research Institute of
Complex Automation. The computer is designed for solving ordinary
linear differential equations up to the 6th order with constant
coefficients, with an accuracy up to 3%. The addition of pressures
is achieved by means of a diaphragm system utilizing the principle
of compensation of forces. Integration is carried out by means of
a system containing series-connected pneumatic resistances (thrott-
le) in the form of a capillary 0.1 mm diameter and 25 mm in length,

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X

A pneumatic continuous action...

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S/194/61/000/006/006/077
D201/D302

whose working volume may be varied to change the time constant within the limits 2 to 200 cm^3, an amplifying stage with gain 1 and a type БC-34A (BS-34A) adder (a standard adder of the automatic control system). The linearity of the operation of integration is retained at frequencies up to 3 rad/sec. The supply of the machine blocs is from a supply line having a pressure of 1.4 atm and the operating range variation of magnitudes is 0.25 to 0.75 atm, the zero level being 0.5 atm. The dimensions of the machine PVM-2 are 600 x 420 x 450 mm. The description is given of a differentiating network together with 3 methods of designing pneumatic delay blocs. 9 figures. 2 references. /Abstracter's note: Complete translation_/

Card 2/2

26.2200

9,7000 (2423)

40301
S/194/62/000/006/021/232
D413/D308

AUTHORS: Lanin, N.D., and Pashintseva, V.I.

TITLE: Design techniques for continuously-operating pneumatic
             computers and their applications

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika,
             no. 6, 1962, abstract 6-1-130 n (V sb. Primeneniye,
             vychisl. tekhn. dlya avtomatiz. proiz-va, M., Mashgiz,
             1961, 445-457)

TEXT: It is pointed out that the expansion of design work on pneu-
matic computers is related to their advantages as compared with
other types of equipment; reliability in operation, simplicity of
construction, temperature invariance of characteristics, fire and
explosion safety. Pneumatic computers whose principle of action is
based on force compensation are considered. Basic elements of a
pneumatic computer are described: integrating, differentiating,
summing and coefficient blocks. The integrating pneumatic block is
designed in the form of an aperiodic chain with feedback, which is
analogous to an electrical circuit and is realized as a fixed re-
Card 1/3

S/194/62/000/006/021/232
D413/D308

Design techniques for continuously-...

sistance, i.e. throttle connected in series with a variable pneuma-
tic capacitance. The fixed resistance is constructed as a capillary
about 0.1 mm in diameter and 20-30 mm long. The variable capacitan-
ce consists of a cylindrical body with a movable piston inside it.
The integrating block does not invert the sign of the input signal.
The working range of pressure variation was taken as 0.25 - 0.75
kg/cm2, with 0.5 kg/cm2 corresponding to zero. The differentiating
block uses a chain with reduced pressure drop across a throttle.
The summing block uses the addition of forces due to the input pres-
sures in diaphragm chambers. A description is given of a pneumatic
computer designed with these components, intended for the investi-
gation of low frequency systems and processes; the maximum working
frequency is about 1 c/s; integrating time is unlimited and there
is no zero drift in the elements. The computer can solve systems of
differential equations up to and including 9th order. It consists
of nine integrating blocks, 18 coefficient blocks, and a main adder
with 12 inputs. It is controlled by opening and closing valves. The
solution of a problem on the pneumatic computer can be carried out
both in the natural timescale and in an altered time-scale. The
output signal in the form of air pressure can be recorded either on
Card 2/3

Design techniques for continuously-...

S/194/62/000/006/021/232
D413/D308

a pneumatic instrument or, by means of a pneumatic converter, on an electronic recorder (oscillograph). The error in the solution $\leqslant 3$ % 6 figures, 6 references. [Abstracter's note: Complete translation.]

Card 3/3

ACCESSION NR: AT3012146

AUTHOR: Lanin, N. D.

TITLE: Pneumatic lag unit and functional transformer

SOURCE: Voprosy* vy*chislitel'noy matematiki i vy*chislitel'noy tekhniki, Moscow, 1963, 354-360

TOPIC TAGS: pneumatic lag, complex automation, storage system, control system, integrating system, pneumatic relay, step function, piecewise linear function, functional transformation

ABSTRACT: The pneumatic lag unit in the pneumatic model equipment assembly at the Tsentral'ny*y nauchno-issledovatel'skiy institut kompleksnoy avtomatizatsii (TsNIKA) (Central Scientific Research Institute of Complex Automation (TsNIKA) has been described in detail. It consists of a storage system, a control system, and an integrating system. The control system has pneumatic relays connected in series through two tubes. To these tubes are connected control lines coming from a linear oscillation generator. The operation principle is outlined, and it is shown that the input function P_{in} is obtained as a step-function approximation with a time shift $\tau - P^o_{ex}$. To reduce errors, the output may be given as a piecewise linear

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ACCESSION NR: AT3012146

approximation. The instrument has the capability of constructing functional trans-
formations for two- or multiple-argument functions. An example is given for
reproducing the function $z = f(x,y)$, approximating it by a plane parallel to x-y.

The function is represented by $z = f(x_i, y_j)$: $\begin{matrix} i = 1, 2, 3, \ldots, n_x \\ j = 1, 2, 3, \ldots, n_y \end{matrix}$ and a block schematic

for its transformation given in Fig. 1 of the Enclosure. Orig. art. has: 13
formulas and 4 figures.

ASSOCIATION: none

SUBMITTED: 00   DATE ACQ: 22Oct63   ENCL: 01

SUB CODE: DP   NO REF SOV: 003   OTHER: 000

Card 2/3
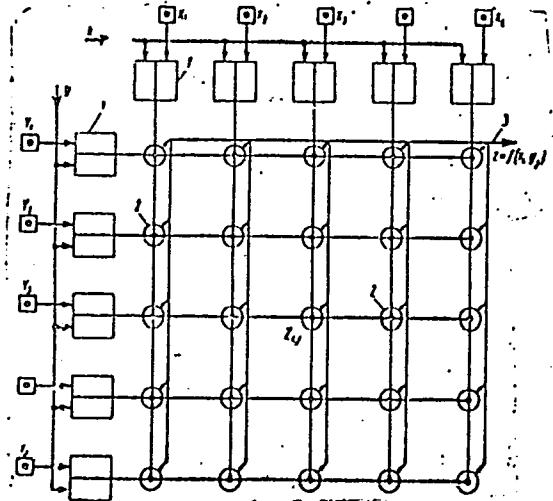
Fig. 1. Block schematic.

Card 3/3

ACCESSION NR: AT4042441   S/0000/64/000/000/0090/0095

AUTHOR: Lanin, N. D.

TITLE: Automated control station for pneumatic regulators

SOURCE: Vsesoyuznoye soveshchaniye po pnevmo-gidravlicheskoy avtomatike. 5th,
Liningrad, 1962. Pnevmo- i gidroavtomatika (Pneumatic and hydraulic control):
materialy* soveshchaniya. Moscow, Izd-vo Nauka, 1964, 90-95

TOPIC TAGS: automation, control system, switching operation, automated control
station, pneumatic control system, pneumatic regulator, remote control

ABSTRACT: The article deals with automated control stations designed to effect the
transition from automatic control of the operating mechanism (from the regulator) to
remote control and vice versa. The author notes that these transition or switch-over
operations normally require considerable time and great care and attention on the part
of the operating personnel. At the same time, the probability of error is particularly
high, this being of special significance in the case of switchover from automatic control
to remote control in emergency situations. For the automation of these switch-over
operations, the Tsentral'ny*y nauchno-issledovatel'skiy institut kompleksnoy avtomati-

Card 1/3

ACCESSION NR: AT4042441

zatsii (Central Scientific Research Institute for Complex Automation) (TSNIIKA) has developed a control system which is available in two versions: (1) with a variable rate of change of the control signal; (2) with a constant rate of change of the control signal. Both types of control stations are described, and the operating principle underlying both is explained in detail. It is pointed out that the assembly which determines the structural arrangement of the station is the servo device, which creates the possibility of memorizing the continuous pneumatic signal for an indefinite period of time with no control signal present, as well as the possibility of varying this pressure when the control signal is received. Some possible versions of structural arrangements of these servo mechanisms are considered; these include a mechanism with a servo jet, a mechanism with comparison units and an integrator-based servo mechanism. The author demonstrates that the auto- mated pneumatic regulator control station is capable of solving the extremely important problem of increasing the reliability of automatic regulation systems. The general principles, presented in this paper, for the design of devices of this type can be employed in other systems as well, together with regulators having a continuous output signal. Orig. art has: 6 figures.

Card 2/3

ACCESSION NR: AT4042441

ASSOCIATION: none

SUBMITTED: 29Jan64   ENCL: 00

SUB CODE: IE   NO REF SOV: 002   OTHER: 000

Card 3/3

L 10680-66   EWT(d)/EWT(m)/EWP(v)/EWP(j)/EWP(k)/EWP(h)/EWP(l)   RM

ACC NR: AP5028746   UR/0096/65/000/012/0026/0032

AUTHOR: Lanin, N.D. (Candidate of Tech. Sci.); Nikolayev, S.A. (Engineer)

ORG: Central Research Institute for Complex Automation (Tsentral'nyy nauchno-issledovatel'skiy institut kompleksnoy avtomatizatsii)

TITLE: Use of pneumatic means in automation systems for thermochemical processes

SOURCE: Teploenergetika, no. 12, 1965, 26-32

TOPIC TAGS: automatic control system, pneumatic control system, thermodynamic process, water purification, thermochemistry, thermoelectric power plant

ABSTRACT: The article presents a detailed description of a pneumatic system for the control of the water treatment installation of a thermoelectric plant. Complete flow diagrams are shown for the operating pneumatic units as well as for the calculating circuits. The "Parus" system described here is built on the module-block principle. The modules are constructed on separate base plates, and commutation between the modules is effected by polyvinyl chloride tubing. Widely separated blocks are connected by pneumatic cable. It is stated that one of these systems has been installed in one of the thermoelectric plants of the Moscow power system and it is concluded that this system

Card 1/2   UDC: 621.187.12:65.011.56

L 10680-66

ACC NR: AP5028746   0

is suitable for the control of a variety of thermochemical systems.
Orig. art. has: 7 figures.

SUB CODE: 13/   SUBM DATE: 00/   ORIG REF: 003/   OTH REF: 000

Card 2/2

L 7036-66   EWT(d)/EEC(k)-2/T/EWP(1)   IJP(c)   BB/GG

ACC NR: AP5026813   SOURCE CODE: UR/0286/65/000/017/0093/0093

AUTHOR: Lanin, N. D.; Barskiy, L. A.

ORG: none

TITLE: A multichannel pneumatic system for information transmission with frequency
division of channels. Class 42, No. 174444

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 17, 1965, 93

TOPIC TAGS: pneumatic computer, pneumatic device, information processing

ABSTRACT: This Author's Certificate introduces: 1. A multichannel pneumatic system
for information transmission with frequency division of channels. The unit contains
carrier frequency oscillators, modulators, a linear mixer, band filters and demodula-
tors. The pneumatic communication lines are multiplexed by using a pneumatic fil-
ter in the system and also an adder connected to a multiplier. The output from the
multiplier is the output for the entire system. This output is connected to two
aperiodic sections, and the outputs from these sections are connected to the adder.
2. A modification of this system which produces sinusoidal oscillations. The pneu-
matic modulator-generator contains the adder and servochamber. The servochamber
nozzle is connected to the adder output, and the transmission line for the signal
which determines the amplitude of the output oscillations is connected to the nega-

Card 1/2   UDC: 681.142.07

L 7036-66

ACC NR: AP5026813

tive chamber of the adder and through a fixed resistance to the nozzle compartment.
3. A modification of this system in which the pneumatic demodulator contains a relay
connected in an iteration scheme, and a diode which is connected to the control
chamber of the relay and through a resistance to the atmosphere.

SUB CODE: DP/   SUBM DATE: 30Jan64/   ORIG REF: 000/   OTH REF: 000

Card 2/2

L. 10202-66   EWT(d)/EEC(k)-2/T/EWP(1)   IJP(c)   BB/GG

ACC NR: AP5028512   SOURCE CODE: UR/0286/65/000/020/0097/0097

AUTHORS: Vaynshteyn-Kovalevskiy, G. Ye.; Gorokhov, V. M.; Koynash, P. I.; Lanin,
N. D.

ORG: none

TITLE: A pneumatic lever multiplication unit. Class 42, No. 175745 /announced by
Experimental Construction Bureau "Teploavtomatii" (Opytno-konstruktorskoye byuro
"teploavtomat"); Central Scientific Research Institute of Comprehensive Automation
(Tsentral'nyy nauchno-issledovatel'skiy institut kompleksnoy avtomatizatsii)_7

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 20, 1965, 97

TOPIC TAGS: pneumatic computer, pneumatic device, positive feedback

ABSTRACT: This Author Certificate presents a pneumatic lever multiplication unit.
The unit consists of two input sylphon bellows, three bars, a balance arm, a movable
support, a feedback bellows, a pneumatic amplifier with a controllable nozzle, and
three tuning springs. In order to multiply pneumatic signals that vary on both sides
of an arbitrary zero, taking into account the sign of the output signal, the upper
part of the moving support is made in the form of two bent elbows, so that the moving
support can be placed above or below the turning axis of the balance arm. The bars
have joints on their ends and can impart forces of both signs.

Card 1/1   UDC: 681.142—525

L 04459-67

ACC NR: AT6021746   SOURCE CODE: UR/0000/66/000/000/0211/0213

AUTHOR: Gorokhov, V. M.; Lanin, N. D.; Kronberg, A. V.

39

ORG: none

TITLE: An electropneumatic transducer \0

SOURCE: AN SSSR. Institut avtomatiki i telemekhaniki. Pnevmoavtomatika (Pneumatic automation). Moscow, Izd-vo Nauka, 1966, 211-213

TOPIC TAGS: pneumatic servomechanism, pneumatic control system, pneumatic device

ABSTRACT: The authors describe the operating principles of an electropneumatic transducer designed for converting continuous or on-off output signals of an electron converter into continuous pneumatic signals varying within 0.2—1 kg/cm^2. The transducer incorporates an electric-to-pneumatic signal converter and a pneumatic integrator.

   A schematic diagram of the electropneumatic transducer is shown in Fig. 1. In this system the electric input signal is converted by means of

Card 1/5

L 04459-67

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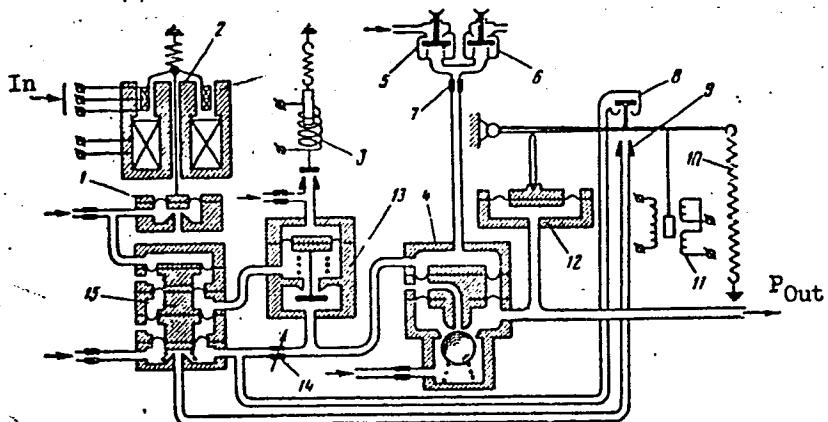
Fig. 1. Schematic diagram of the electropneumatic transducer

1 - Force-to-pressure converter; 2 - electrodynamic relay; 3 - integrator electropneumatic valve; 4 - integrator power amplifier;
5, 6 - integrator pneumatic valves; 7 - restriction; 8, 9 - nozzles;
10 - spring; 11 - differential transformer; 12 - diaphragm-type. drive;
13 - integrator pneumatic valve; 14 - integrator restriction;
15 - diaphragm adder.

Card 2/5

L 04459-67

ACC NR: AT6021746

electrodynamic relay 2 into a proportional force and then, through element 1, into a pressure difference proportional to the input signal. This pressure is passed on to the diaphragm adder 15 of the integrator. Variable restricter 14, the opening of which determines the time constant of the integrator, is located at the output of the adder. Electropneumatic valve 3 sets the output pressure (position of the servo mechanism) during power failure in the electrical circuit and during the transition to manual remote control. When this valve is de-energized, the line pressure which controls the operation of pneumatic valve 13 drops and the latter cuts off the feedback chamber of the adder, thus excluding the possibility of integration of random input signals.

During manual remote-control operation, an electric signal is sent simultaneously to the moving coil of the electrodynamic relay and to electropneumatic valve 3; as a result, the signal is integrated while being transmitted. A local manual change of pressure is accomplished by means of pneumatic valves 5 and 6, which can be used either to increase the pressure in the input chamber of power amplifier 4 through the use of the highpressure line or to relieve it. The rate of change of the output pressure is controlled by restriction 7. The feedback signal is picked off from dif-

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L 04459-67

ACC NR: AT6021746

ferential transformer 11. The motion of the transformer plunger is con-
trolled by spring-loaded diaphragm drive 12.

The electropneumatic transducer is equipped with protective nozzles
8 and 9. When the pressure drops below 0.2 kg/cm^2, nozzle 9 closes and
prevents further lowering of the pressure. When the pressure is increased
to 1 kg/cm^2 nozzle 8 opens, thus excluding the possibility of a further in-
crease.

A circuit diagram of a transducer of electric on-off signals is shown
in Fig. 2. The signal enters one of the electropneumatic solenoid relays 3
whose core position determines the pneumatic output signal. The system
employs a lever-type integrator (lever 7, on which moments of forces
developed by the four bellows are compared). From relay 3, signals
Pin+ and Pin- are sent to bellows 11 and 12, while positive and negative
feedback signals are fed to bellows 9 and 10, respectively. Local control
valves 1, together with nozzles 13, maintain the output pressure variation
within 0.2-1 kg/cm^2.

4/5

L 04459-67

ACC NR: AT6021746
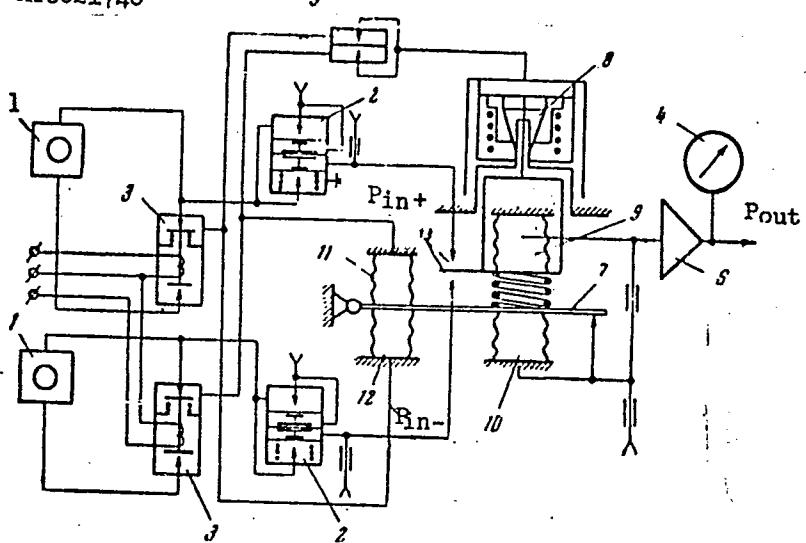
Fig. 2. Schematic diagram of the on-off signal transducer.

1 - Control valves; 2, 3 - relay; 4 - pressure gage; 5 - OR
element; 6 - power amplifier; 7 - lever; 8 - braking device;
9, 10, 11, 12 - bellows; 13 - nozzles.

SUB CODE: 13 / SUBM DATE: 03Feb66

Card 5/5

LANIN, Nikolay Nikolayevich, voennyy zhurnalist, kapitan pervogo ranga;
    TONKOV, A.A. red.; KUZ'MIN, I.F., tekhn. red.

    [To the land of "Suomi."] V stranu Suomi. Moskva, Voen.izd-vo
    M-va obor.SSSR, 1961. 62 p.   (MIRA 14:11)
    (Finland--Visitors, Russian) (Finland--Description and travel)

LANIN, S., inzhener.

Repairing pivots of shock-absorber arms on GAZ-67 and M-20 auto-
mobiles. Avt.transp. 32 no.3:34 Mr '54.   (MLRA 7:8)
     (Shock absorbers)

YASAKOV, V.;   LANIN, S.

Testing the parts of the front suspension member of the M-20 truck.
Avt. transp. 33 no.11:30 N '55.   (MLRA 9:3)
                              (Motortrucks--Testing)

LANIN, S., inzhener; SHAFFE, N.

Centering the front suspension crankshaft of the Moskvich truck.
Avt.transp. 33 no.12:19 D '55.   (MLRA 9:3)
              (Motortrucks--Repairing)

LANIN, S.

Strengthen the payment discipline of enterprises. Den. i
kred. 21 no.12:58-60 D '63.   (MIRA 17:1)

1. Upravlyayushchiy Mikhaylovskim otdeleniyem Kurskoy
oblastnoy kontory Gosbanka.

YASAKOV, V.P.; LANIN, S.A.

Making a copying device for the machine tool used for
grinding cams of distributing shafts. Obm.tekh.opyt.na
avt.transp. no.3:48-51 '60.   (MIRA 13:7)
        (Grinding machines--Numerical control)

LANIN, S.A.

Checking parts of the front suspension of the M-20 "Pobeda"
automobile. Obm.tekh.opyt.na avt.transp. no.4:33-37 '60.
                                                (MIRA 13:12)
    (Automobiles--Springs)

DESHEO, Yu.I., inzh.; SHLEMOVICH, V.I., inzh.; ROZENBLYUM, Yu.B., inzh.;
    LANIN, S.A., inzh.

Device for the semiautomatic loading of cement from silos to
cement trucks. TSement 30 no.5:18-19 S-O '64.
                                              (MIRA 17:12)

1. Vsesoyuznoye gosudarstvennoye spetsial'noye byuro po provedeniyu
pusko-naladochnykh i proyektno-konstruktorskikh rabot v tsementnoy
promyshlennosti Gosstroya SSSR.

LANIN, V.; DMITRIYEV, P.

Record of production training. Prof.-tekh. obr. 19 no.9:20-21
S '62.   (MIRA 15:10)

(Farm mechanization—Study and teaching)

YELISTRATOV, V.P.; BALASHOV, L.Ye.; LANIN, V.D. (Shcherbakovskaya ul. d. 44-a,
Moskva).

What we demand from architects and builders. Gor. khoz. Mosk. 32
no.2:8-9 F '58.   (MIRA 11:1)

1. Chleny obshchestvennoy komissii sodeystviya pri domoupravlenii.
(Moscow--Apartment houses)

LANIN, V.I.

Shift of radial reaction during the rolling of a wheel with
a flexible tire. Avt. prom. 31 no.6:30-32 Je '65.
(MIRA 18:10)

LANIN, V.I., kandidat tekhnicheskikh nauk.

Roll of the drive wheel having an elastic tire. [Trudy] MVTU
no.61:8-19 '55.   (MIRA 9:6)
        (Automobiles--Wheels)

LANIN, V.I., dotsent, kand.tekhn.nauk

Deformation and hysteresis of flexible tires. Izv.vys.
ucheb.zav.; mashinostr. no.3:156-168 '59.   (MIRA 13:3)

1. Moskovskoye vyssheye tekhnicheskoye uchilishche imeni
N.Ye.Baumana.
                (Automobiles--Tires)

LANIN, V. S.

Journal of the American
Ceramic Society
Vol. 37 No. 5
May 1, 1954
Production Equipment and
Unit Operations

③ *matic*

Controlling the operation of electric motors of a rotary kiln.
V. S. LANIN AND I. L. SHUL'MAN.   *Tsement*, 19 [5] 8–15 (1953).
Relay mechanisms for controlling the operation of electric motors
serving a 150-m. rotary cement kiln are described and illustrated.
The system proved dependable in new cement works in the Urals
and in Lithuania.   B.Z.K.

LANIN, V.S., inzhener.

     Automatic control of coal mills. TSement 22 no.2:17-21 Mr-Ap '56.
     (Milling machinery) (Automatic control)   (MIRA 9:9)

IANIN, Yu.

Change the drawing up of bills of loading for the "Kazbek" type
tankers. Mor. flot. 25 no. 12:12 D '65.   (MIRA 18:12)

1. Gruppovoy dispetcher sluzhby perevozok i dvizheniya
Upravleniya nefteflota Chernomorskogo parokhodstva.

SUBJECT: SZG/Electric Equipment   101-4-3/13

AUTHOR: Lanin, V.S., Engineer

TITLE: "Principles of Construction of Electric Switching Equipment Units in Cement Plant
              Shops"   (Agregatnyy printsip konstruirovaniya tsekhovogo kommu-
              tatsionnogo elektrooborudovaniya tsementnykh zavodov)

PERIODICAL: "Tsement", 1957, #4, pp 15-18 (USSR)

ABSTRACT: Electric equipment of cement plants is rather complex, and
              the different types of commutators and safety devices prevent
              any modification. Therefore, fundamental changes are required
              in the construction of power distribution facilities.

              The following principles should be observed:
              1. Standardization of control circuits and means of blocking
              and safeguarding wiring.
              2. Construction of circuits in the form of standard blocks.
              3. Possibility to adapt units for various combinations.
              4. Interchangeability and compactness of blocks.

              The "BERLIN Plant for Electric Appliances Imeni Stalina" in
              conjunction with Russian specialists constructed commutator
Card 1/2   blocks with standard wiring diagrams adapted to the various

101-4-3/13

TITLE: ·"Principles of Construction of Electric Switching Equipment Units in Cement Plant Shops" (Agregatnyy printsip konstruirovaniya tsekhovogo kommutatsionnogo elektrooborudovaniya tsementnykh zavodov)

switching requirements of cement plants.

The article contains 4 wiring diagrams.

INSTITUTION:

PRESENTED BY:

SUBMITTED:

AVAILABLE: At the Library of Congress

Card 2/2

LANINA, A. V.

LANINA, A. V.   "The Development of Meat and Dairy Productivity in
Cattle of the Kazakh Whitehead Breed."   Min Higher
Education USSR. Alma-Ata Zooveterinary Inst.   Alma-
Ata, 1955.   (DISSERTATION FOR THE DEGREE OF CANDIDATE
IN AGRICULTURAL SCIENCE).

Knizhnaya Letopis',
No. 27, July 2, 1955.

USSR/Farm Animals. Cattle   Q-2

Abs Jour : Ref Zhur - Biol., No 19, 1958, No 88037

Author   : Lanina, A.V.
Inst   : Alma-Ata Zooveterinary Institute
Title   : Some Factors in the Transformation of Cattle

Orig Pub : Tr. Alma-Atinsk. zoovet. in-ta, 1957, 10, 31-40

Abstract : Under the influence of the conditions of care and growth, and
           also conditions of breeding work, two groups of cattle
           (local x redsteppe, and local x Heregord) differing in
           type and in orientation of productivity, changed in the
           sense that their conformation and productivity became mu-
           tually similar. The red-steppe breed improved the beef qual-
           ities, and the Hereford breed, the dairy qualities.

Card   : 1/1

LANINA, A.V., dots.

Selection in beef husbandry. Zhivotnovodstvo 21 no.2:41-49   F '59.
                                                    (MIRA 12:3)
   1. Zamestitel' direktora Alma-Atinskogo zoovetinstituta.
                (Beef cattle)

LAFINA, K. G.

"Geobotanical Characteristics of the forests of the Surtereshkin-Medveditsa Watershed and Prospects for Their Improvement and Expansion." Cand Biol Sci, Saratov State U, Saratov, 1953. (RZhBiol, No 1, Sep 54)

SO: Sum 432, 2 Mar 55

LANINA, L.B.

Studying pastures for moose in the Pechoro-Ilych Preserve.
Trudy Pech.-Il.gos.zap. no.7:182-212 '59.   (MIRA 15:5)
        (Pechoro-Ilych Preserve--Moose)
            (Pastures and meadows)

BOGAN, F.Ye.; LANINA, L.B.; MEGAL'SKIY, K.O.; SOKOL'SKIY, S.M.;
    YAZAN, Yu.P.; KNORRE, Ye.P.; SOLOV'YEVA, M.Ye., red.;
    OPLESNIN, I.I., tekhn. red.

[Reservation in Pechora; popular science sketch] Zapo-
vednik na Pechore; nauchno-populiarnyi ocherk. [By] F.E.
Bogan i dr. Syktyvkar, Komi knizhnoe izd-vo, 1963. 114 p.
                                        (MIRA 16:10)

    (Pechora Valley—National parks and reserves)

SHUR, Yakov Isidorovich; LANINA, L.I., redaktor; FURMAN, G.V., tekhnicheskiy
redaktor

[The magnetic compass; a historical sketch] Magnitnyi kompas; istori-
cheskii ocherk. Moskva, Izd-vo "Znanie," 1956. 31 p. (Vsesoiuznoe
obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii.
Ser. 3, no.41)   (MLRA 9:10)
        (Compass)

LANINA, L.I.

DAVYDOV, Mitrofan Mikhaylovich; LANINA, L.I., red.; GUBIN, M.I., tekhn.red.

⌊Prospects for over-all utilization of Siberian water power⌋
Perspektivy kompleksnogo ispol'zovaniia stoka sibirskikh rek. Moskva,
Izd-vo "Znanie," 1957. 31 p. (Vsesoiuznoe obshchestvo po rasprostrane-
niiu politicheskikh i nauchnykh znanii. Ser.4, no.31) (MIRA 11:1)
                        (Siberia--Hydroelectric power)

SUSHKOV, Yuriy Nikolayevich; LANINA, L.I., red.; BERLOV, A.P., tekhn. red.

[Atomic energy in aviation] Atomnaia energiia v aviatsii. Moskva, Izd-vo "Znanie," 1958. 29 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii. Ser. 4, no. 22).
(Atomic planes)   (MIRA 11:10)

PARFENOV, Vasiliy Aleksandrovich, kand.tekhn.nauk; LANINA, L.I., red.;
     GUBIN, M.I., tekhn.red.

     [Metals of progress] Metally progressa. Moskva, Izd-vo "Znanie,"
     1958. 31 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politi-
     cheskikh i nauchnykh znanii. Ser.4, no.1)   (MIRA 11:2)
          (Metals)

GOLDOVSKIY, Yevsey Mikhaylovich, zasluzhenniy deyatel' nauki i tekhniki,
doktor tekhn.nauk, prof.;STANYUKOVICH, Kirill Petrovich, doktor
tekhn.nauk, prof.; LYAPUNOV, Boris Valerianovich, inzh.;
DOSTUPOV, Boris Grigor'yevich, kand.tekhn.nauk; MAGAZANKIN, D.N.,
red.; LANINA, L.I., red.; BERLOV, A.P., tekhn.red.

[News of science and technology; from the materials of Sunday
lectures delivered at the Polytechnical Museum] Novosti nauki i
tekhniki; po materialam voskresnykh chtenii Politekhnicheskogo
muzeia. Moskva, Izd-vo "Znanie," 1958. 53 p. (Vsesoiuznoe
obshchestvo po rasprostraneniiu politicheskikh i nauchnykh snanii.
Ser.4, nos.32/33)   (MIRA 11:12)
    (Motion pictures, Three-dimensional) (Calculating machines)
                    (Interplanetary voyages)

FINKEL'SHTEYN, David Naumovich, kand.khimicheskikh nauk; LANINA, L.I., red.;
    SAVCHENKO, Ye.V., tekhn.red.

[Synthetic minerals] Iskusstvennye mineraly. Moskva, Izd-vo
"Znanie," 1959. 31 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu
politicheskikh i nauchnykh znanii. Ser. 4. Nauka i tekhnika, no.3)
                                                    (MIRA 12:2)
            (Synthetic products)   (Mineralogy)

VISHNEVSKIY, Aleksandr Yakovlevich; LANINA, L.I., red.; ATROSHCHENKO,
    L.Ye., tekhn.red.

    [Household electric appliances] Bytovye elektricheskie mashiny
    i pribory. Moskva, Izd-vo "Znanie," 1959. 43 p. (Vsesoiuznoe
    obshchestvo po rasprostraneniiu politicheskikh i nauchnykh
    znanii. Ser.4, Nauka i tekhnika, no.7)   (MIRA 12:8)
           (Electric apparatus and appliances)

MAKSIMOV, Leonid Yur'yevich; LANINA, L.I., red.; SAVCHENKO, Ye.V., tekhn.red.

[A tale about automabic machines] Rasskaz ob avtomatakh. Moskva,
Izd-vo "Znanie," 1959. 45 p. (Vsesoiuznoe obshchestvo po ras-
prostraneniiu politicheskikh i nauchnykh znanii. Ser.10, Molo-
dezhnaia, no.10)   (MIRA 12:11)
                    (Automation)

LOBANOV, Vitaliy Nikolayevich; CHERNIKOV, Dmitriy Aleksandrovich; LANINA,
    L.I., red.; NAZAROVA, A.S., tekhn. red.

    ["Vostok-2" is in space; story on the spaceflight of astronaut
    G.S.Titov] V kosmose – "Vostok-2"; rasskaz o polete vo vselennuiu
    letchika-kosmonavta G.S.Titova. Moskva, Izd-vo ": Znanie," 1961.
    47 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh i
    nauchnykh znanii. Ser.10, Molodezhnaia, no.18)   (MIRA 14:9)
            (Astronautics)   (Titov, German Stepanovich, 1935-)

SMOLYANITSKIY, Solomon Vladimirovich; LANINA, L.I., red.; RAKITIN, I.T. ,
        tekhn. red.

    [Listen, life!] Slushai, zhizn'! Moskva, Izd-vo "Znanie," 1961.
    46 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politiche-
    skikh i nauchnykh znanii. Ser.10, Molodezhnaia, no.24)
                                              (MIRA 15:1)
                    (Construction workers)

LYASHENKO, Valentin Yefimovich; LANINA, L.I., red.; RAKITIN, I.T., tekhn. red.

[Always searching] Vsegda v poiske. Moskva, Izd-vo "Znanie," 1962. 30 p. (Novoe v zhizni, nauke, tekhnike. X Seriia: Mo-lodezhnaia, no.6)   (MIRA 15:6)
(Agriculture)

LYAPUNOV, Boris Valerianovich; LANINA, L.I., red.; RAKITIN, I.T.,
    tekhn. red.

[By means of thousands of sense organs] Tysiachami organov chuvstv.
Moskva, Izd-vo "Znanie," 1962. 30 p. (Novoe v zhizni, nauke,
tekhnike. X Seriia: Molodezhnaia, no.2)   (MIRA 15:5)
    (Scientific apparatus and instruments—Technological innovations)

ULESOV, Aleksey Aleksandrovich, dvazhdy Geroy Sotsialisticheskogo
      Truda, elektrosvarshchik; LANINA, L.I., red.; NAZAROVA, A.S.,
      tekhn. red.

      [Fire in hands] Ogon' v rukakh. Literaturnaia zapis' B.Anina.
      Moskva, Izd-vo "Znanie," 1962. 30 p. (Novoe v zhizni, nauke,
      tekhnike. X Seriia: Molodezhnaia, no.1.)   (MIRA 15:5)
                           (Electric welding)

GAVRILOV, Yuriy Aleksandrovich; LANINA, L.I., red.; NAZAROVA, A.S., tekhn.
    red.

[At the other end of the world; Moscow – Antarctica – Moscow]
Za trideviat' zemel'; Moskva – Antarktida – Moskva. Moskva,
Izd-vo "Znanie," 1962. 47 p. (Novoe v zhizni, nauke, tekhnike.
X Seriia: Molodezhnaia, no.13)   (MIRA 15:7)
                        (Antarctic regions)

GUTOVSKIY, Vladimir Nikolayevich; LANINA, L.I., red.; RAKITIN, I.T.,
tekhn. red.

[Contribution of science to power engineering]Nauka -
energetike. Moskva, Izd-vo "Znanie," 1962. 38 p. (Novoe v
zhizni, nauke, tekhnike. X Seriia: Molodezhnaia, no.23)
(MIRA 15:12)
(Power engineering)   (Electric power production)

BORISOV, Vladimir; LANINA, L.I., red.; NAZAROVA, A.S., tekhn. red.

[Radio echo in the outer space]Radioekho v kosmose. Moskva, Izd-vo "Znanie," 1963. 29 p. (Novoe v zhizni, nauke, tekhnike, X Seriia: Molodezhnaia, no.6)   (MIRA 16:4)
(Radio astronomy) (Space ships) (Artificial satellites)

MARIINSKIY, Yevgeniy Pakhomovich, Geroy Sovetskogo Soyuza, zhurnalist;
     LANINA, L.I., red.; ATROSHCHENKO, L.Ye., tekhn. red.

    [Fifteen centimeters to earth]Do Zemli 15 santimetrov. Moskva,
    Izd-vo "Znanie," 1963. 47 p. (Novoe v zhizni, nauke, tekhnike.
    X Seriia: Moledezhnaia, no.3)   (MIRA 16:2)
      (World War, 1939-1945--Personal narratives)
          (Air pilots)

ANZIMIROV, Georgiy L'vovich; RODIONOV, Feliks Nikolayevich;
LANINA, L.I., red.; RAKITIN, I.T., tekhn. red.

[Good job; travel notes made on earth, in the air, and on
the ocean] Khoroshaia dolzhnost'; putevye zametki, sdelannye na
zemle, v vozdukhe i okeane. Moskva, Izd-vo "Znanie," 1963.
47 p. (Novoe v zhizni, nauke, tekhnike. X Seriia: Molodezhnaya,
no.7)   (MIRA 16:5)
        (Kamchatka—Description and travel)

KHMARA, Viktor Vasil'yevich; LANINA, L.I., red.; ATROSHCHENKO, L.Ye.,
     tekhn. red.

     [Katiusha from the Honshu Island; a report from Japan] Katiu-
     sha s ostrova Khonsiu; reportazh iz IAponii. Moskva, Izd-vo
     "Znanie," 1963. 31 p. (Novoe v zhizni, nauke, tekhnike. X Se-
     riia: Molodezhnaia, no.12)   (MIRA 16:8)
              (Japan--Description and travel)

DUEL', Igor' Il'ich; LANINA, L.I., red.; RAKITIN, I.T., tekhn.
red.

[Second discovery of the ocean] Vtoroe otkrytie okeana.
Moskva, Izd-vo "Znanie," 1963. 31 p. (Novoe v zhizni,
nauke, tekhnike. X Seriia: Molodezhnaia, no.24)
(MIRA 17:2)

BABLYUK, Boris Timofeyevich; LANINA, L.I., red.; RAKITIN, I.T.,
tekhn. red.

[Song of the forest; a documentary tale] Lesnaia pesnia;
dokumental'naia povest'. Moskva, Izd-vo "Znanie," 1964.
47 p. (Novoe v zhizni, nauke, tekhnike. X Seriia: Molodezh-
naia, no.1)   (MIRA 17:1)

IVANCHENKO, Aleksandr Semenovich; LANINA, L.I., red.; ATROSHCHENKO,
    L.Ye., tekhn. red.

    [The paths of courage] Dorogi muzhestva. Moskva, Izd-vo
    "Znanie," 1964. 31 p. (Novoe v zhizni, nauke, tekhnike.
    X Seriia: Molodezhnaia, no.6)   (MIRA 17:3)

PAVLOV, Andrey Vladimirovich; SHKVARKO, Vladimir Vasil'yevich;
LANINA, L.I., red.

[At the fighting front of chemistry] Na udarnom khimi-
cheskom fronte. Moskva, Izd-vo "Znanie," 1964. 47 p.
(Novoe v zhizni, nauke, tekhnike. X Seriia: Molodezh-
naia, no.12)   (MIRA 17:6)

ZHURAVLEV, Vasiliy Aleksandrovich; KIYASHKO, Fedor Nikolayevich;
LANINA, L.I., red.

[Basis of crop yields] Nachalo urozhaia. Moskva, Izd-vo
"Znanie," 1965. 45 p. (Novoe v zhizni, nauke, tekhnike.
X Seriia: Molodezhnaia, no.6)   (MIRA 18:6)

SMIRNOV, Yevgeniy Alekseyevich; LANINA, L.I., red.

[How do you like the service...] Kak tebe sluzhitsia...
Moskva, Znanie, 1965. 62 p. (Novoe v zhizni, nauke, tekh-
nike. X Seriia: Molodezhnaia, no.15)   (MIRA 18:8)

L'VOV, Boris L'vovich; LANINA, L.I., red.

    [We are building a house] My stroim dom. Moskva, Zna-
nie, 1965. 44 p. (Novoe v zhizni, nauke, tekhnike.
X. Seriia: Molodezhnaia, no.14)   (MIRA 18:7)

RUMER, Mikhail Zalmanovich; LANINA, L.I., red.

[Institute at a plant; Boris Burtsev becomes an engineer]
Institut na zavode; Boris Burtsev stanovitsia inzhenerom.
Moskva, Znanie, 1965. 46 p. (Novoe v zhizni, nauke, tekh-
nike. X Seriia: Molodezhnaia, no.18)   (MIRA 18:8)

AZERNIKOV, Valentin Zakharovich; LANINA, L.I., red.; RAKITIN, I.T.,
        tekhn. red.

    [Decoded code] Razgadannyi kod. Moskva, Izd-vo "Znanie,"
    1963. 39 p. (Novoe v zhisni, nauke, tekhnike. X Seriia:
    Molodezhnaia, no.15)   (MIRA 16:10)
        (Proteins) (Chemical genetics)

GORBUNOV, Grigoriy Ivanovich; LANINA, L.I., red.; NAZAROVA, A.S.,
    tekhn. red.

[Virgin land in Stavropol region] Stavropol'skaia nov'.
Moskva, Izd-vo "Znanie," 1963.   39 p. (Novoe v zhizni,
nauke, tekhnike. X Seriia: Molodezhnaia, no.10)
                                        (MIRA 16:6)
            (Grigoripolisskiy--Agriculture)

KOSTYAYEV, Pavel Sergeyevich; LANINA, L.I., red.; ATROSHCHENKO,
L.Ye., tekhn. red.

[Start of an engineer's career]Nachalo puti inzhenera. Mo-
skva, Izd-vo "Znanie," 1962. 31 p. (Novoe v zhizni, nauke,
tekhnike. X Seriia: Molodezhanaia, no.19)   (MIRA 15:10)
    (Railroads—Construction)   (Bridges, Concrete)

BREMENER, S.M.; VELIKOVSKAYA, M.M.; ZUYEVA, Z.V.; LANINA, N.V.;
TARNOPOL'SKAYA, P.D.

Use of vitamin B_6 and B_{12} in compound treatment of stomach
and duodenal ulcer. Vest. AMN SSSR 18 no.2:85-87 '63.
(MIRA 17:5)

1. Nauchno-issledovatel'skiy institut vitaminologii Ministerstva
zdravookhraneniya SSSR.

KOLESNIKOVA, T.A.; LAPITSKAYA, O.I.; LANINA, T.N.

Obtaining raw stocks for the production of bivinyl by the selective polymerization of a butane-butylene fraction. Trudy Bash NIINP no.5: 176-180 '62.
(MIRA 17:10)

LANINA V. N.

USSR/Scientists - Literature

Card 1/1   Pub. 124 - 25/32

Authors   : Lanina, V. N., Cand. of Philol. Sc.

Title   : Memorable dates, Lectures, Conferences

Periodical : Vest. AN SSSR 25/6, 105-106, June 1955

Abstract   : Notes are presented from the traditional lectures held at the A. M.
             Gorkiy Institute of World Literature, honoring the 87-th birthday of
             the renown Russian-Soviet writer, A. M. Gorkiy.

Institution : .....

Submitted : .....

L 25115-65   EWT(m)/T/EWP(t)/EWP(b)   IJP(c)   JD/JG
ACCESSION NR: AP5003423   S/0181/65/007/001/0123/0126

AUTHORS: Kraftmakher, Ya. A.; Lanina, Ye. B.

TITLE: Energy of vacancy formation and vacancy concentration in platinum

SOURCE: Fizika tverdogo tela, v. 7, no. 1, 1965, 123-126

TOPIC TAGS: platinum, vacancy formation, vacancy concentration, specific heat, electric resistivity

ABSTRACT: Inasmuch as earlier methods did not yield reliable data on the equilibrium concentration of vacancies in platinum, the authors studied the formation of vacancies by measuring the electric resistivity and the specific heat at high temperatures (1000--2000K). The measurements were made on wires 0.05 mm in diameter and 100-- 250 mm long. The electric resistance of the samples at high temperatures was determined directly from the radiated power at temperatures above 1500K, and from the quadratic dependence of the re-

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L 25115-65
ACCESSION NR: AP5003423

sistance of the temperature at temperatures between 1000 and 1500K. A modulation method was used to measure the specific heat, as described by one of the authors elsewhere (Kraftmakher, PMTF, no. 5, 176, 1962). The energy of vacancy formation was calculated from the temperature dependence of the increase in electric resistivity and also from the measurements of the specific heat, both methods yielding the same result. A concentration given by the expression $c = 90 \exp (-1.6/kT)$ was obtained, reaching 1% at the melting temperature. The additional resistance, connected with the formation of the vacancies, amount to 2.4 microhm-cm for each per cent of vacancies. The results are in satisfactory agreement with related data by others. "The authors thank P. G. Strelkov for interest in the work and for valuable remarks." Orig. art. has: 3 figures and 3 formulas.

ASSOCIATION: Institut teplofiziki SO AN SSSR, Novosibirsk (Institute of Heat Physics, SO AN SSSR)

Card   2/3

L 25115-65

ACCESSION NR: AP5003423

SUBMITTED: 27Jun64   ENCL: 00   SUB CODE: SS,Em

NR REF SOV: 010   OTHER: 020

Card   3/3

LANINS, K.

10. Investigation of a high energy jet. Gy. Bozoki, G. Domokos, E. Fenyves, E. Gombosi, K. Lanins, H. W. Moler, A Magyar Tudomanyos Akademia Kazponli Fizikai Kutato Intezetenek Kozlemenyei--(Proceedings of the Central Research Institute for Physics of the Hungarian Academy of Sciences), Vol. 6, 1958. No. 3, pp. 105-116, 2 figs. 3 tabs.

FOR ABSTRACT-SEE CARD FOR BOZOKI, GY.