KOLESNIKOV, I.S.; YERMOLAYEV, V.R.; SOKOLOV, S.N.; MEZHEVIKIN, N.I.

Resection of the basal segments of the lungs. Grud. khir. 5 no.5:46-51 S-O '63. (MIRA 17:8)

1. Iz kafedry gospital'noy khirurgii (nachal'nik - prof. I.S. Kolesnikov) Voyenno-meditsinskoy ordena Lenina akademii imeni Kirova. Adres avtorov: Leningrad K-9, Botkinskaya ul., d.23, Klinika gospital'noy khirurgii Voyenno-meditsinskoy ordena Lenina akademii.

KOLESNIKOV, I.S., prof.; YERMOLAYEV, V.R.; kand. med. nauk; SOKOLOV, S.N., kand. med. nauk

Surgical anatomy and technique of resection of the lingular segments of the left lung. Vest. khir. 91 no.12:27-32 D '63. (MIRA 17:9)

1. Iz 1-y gospital'noy khirurgicheskoy kliniki (nachal'nik - prof. I.S. Kolesnikov) i kafedry operativnoy khirurgii (nachal'nik - prof. A.N. Maksimenkov) Voyenno-meditsinskoy ordena Lenina akademii imeni Kirova. Adres avtorov: Leningrad, K-9, Botkinskaya ulitsa, 23, klinika gospital'noy khirurgii Voyenno-meditsinskoy ordena Lenina akademii imeni Kirova.

KOLESNIKOV, I.S., prof.; YEMMOLAYEV, V.R.; SOKOLOV, S.N.; MEZHEVITIN, N.I.

Resection of the mediobasal segment of the lung. Vest. khir. 92 no.4:16-21 Ap '64 (MIRA 18:1)

1. Iz gospital'noy khirurgicheskoy kliniki (nachal'nik - prof. I.S. Kolesnikov) i kafedry operativnoy khirurgii i topograficheskoy anatomii (nachal'nik - prof. A.N. Maksimenkov) Voyenno-meditsinskoy ordena Lenina akademii imeni S.M. Kirova. Adres avtorov: Leningrad, K-9, Botkinskaya ul, 23, gospital'naya khirurgicheskaya klinika Voyenno-meditsinskoy ordena Lenina akademii imeni S.M. Kirova.

KEPPEKO, A.T., red.; GURNVICH, M.S., red.; GINZBURG, A.S., red.; YERSHOLAYEV, V.V., red.; ZHUK, A.A., red.; USPENSKIY, V.V., red.; [illegible], B.A., red.izd-va; YEMKINA, Ye.L., tekhn.red.; KOSHEVEVA, V.I., tekhn.red.

[Section on the economics of the construction industry] Sektsiia ekonomiki stroitel'stva. Moskva, Gosstroiizdat, 1958. 369 p. (MIRA 12:6)

1. Vsesoyuznoye soveshchaniye po stroitel'stvu. 3rd, Moscow, 1958.
(Construction industry--Costs)

YERMOLAYEV, V. Yu.; CHERNIGOVSKIY, V.N., akademik

Participation of some structures of the limbic system in the transmission of visceral and somatic signalization. Dokl. AN SSSR 159 no.3:686-689 N '64 (MIRA 18:1)

1. Institut fiziologii imeni I.P.Pavlova AN SSSR.

VOLIK, Yuriy Prokof'yevich; YERMOLAYEV, Yevgeniy Nikolayevich; CHESNOKOV, Viktor Kuz'mich; STEL'MAKOV, S.M., red.; FREGER, D.P., red. izd-va; BELOGUROVA, I.A., tekhn. red.

[Ejecting device for forging on crankshaft presses: stenographic record of a lecture course]Vytalkivaiushchie ustroistva pri shtampovke na krivoshipnykh goriacheshtampovochnykh pressakh; stenogramma lektsii. Leningrad, 1962. 26 p. (MIRA 15:8)

(Forging) (Power presses)

AID P - 4637

Subject : USSR/Aeronautics - education

Card 1/1 Pub. 135 - 3/26

Author : Yermolayev, Yu. A., Guards Cpt.

Title : From the experience in educational work of squadron commanders.

Periodical : Vest. vozd. flota, 5, 12-15, My 1956

Abstract : It is stressed by the author that in the interest of better training the squadron commander and his closest assistants should pay more attention to the study of their subordinates in order to learn more about their character, abilities, behavior and tendencies. The article is of no particular interest.

Institution : None

Submitted : No date

16.1500

S/020/60/132/02/04/067

AUTHOR: Yermolayev, Yu. B.

TITLE: Simultaneous Reduction of a Pair of Bilinear Forms to the Standard Expression

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 132, No. 2, pp. 257-259

TEXT: The author considers the pair of bilinear forms

$$(1) \qquad \begin{aligned} A(x,y) &= x'Ay \\ B(x,y) &= x'By, \end{aligned}$$

where the matrices A and B are so that $A' = \alpha A$, $B' = \beta B$ ($\alpha^2 = \beta^2 = 1$). Let V_1 and V_2 be linear vector spaces over the same field. The pair (A_1,B_1) is assumed to be defined on V_1, the pair (A_2,B_2) on V_2. By the direct sum of the pairs (A_1,B_1) and (A_2,B_2) the author understands a pair of forms (A, B) which is defined on $V = V_1 + V_2$ by

$$A(x_1 + x_2, y_1 + y_2) = A_1(x_1, y_1) + A_2(x_2, y_2)$$
$$B(x_1 + x_2, y_1 + y_2) = B_1(x_1, y_1) + B_2(x_2, y_2)$$

Card 1/2

S/020/60/132/02/04/067

Simultaneous Reduction of a Pair of Bilinear Forms to the Standard Expression

$x_1, y_1 \in V_1$; $x_2, y_2 \in V_2$.

The author proves that an arbitrary pair of bilinear forms with aforementioned properties is uniquely representable as a direct sum of quite specific (explicitly given) pairs of forms. He obtains a similar result for the pair of forms

$$(4) \qquad \begin{matrix} A(x,y) = x'Ay \\ H(x,y) = x'H\bar{y} \end{matrix}$$

where $A' = \alpha A$, $\alpha = \pm 1$ and H is a Hermitean matrix; both are given on the n-dimensional vector space over the field of complex numbers. There are 2 references: 1 Soviet and 1 American.

ASSOCIATION: Kazanskiy gosudarstvennyy universitet imeni V. J. Ul'yanova - Lenina (Kazan' State University imeni V. J. Ul'yanov - Lenin)

PRESENTED: January 12, 1960, by A. J. Mal'tsev, Academician

SUBMITTED: January 6, 1960

Card 2/2

L 06584-67 EWP(k)/EWT(d)/EWP(h)/EWP(1)/EWP(v)

ACC NR: AP6011288 SOURCE CODE: UR/0378/66/000/001/0072/0078

AUTHOR: Yermol'yev, Yu. M.; Gulenko, V. P.

36
8

ORG: none

14

TITLE: Numerical methods of solving optimal control problems

SOURCE: Kibernetika, no. 1, 1966, 72-78

TOPIC TAGS: optimal automatic control, computer programming, difference equation .

ABSTRACT: This article primarily illustrates the capabilities resulting from analysis of difference analogs in optimal control problems as a specific problem in mathematical programming. The time spent on development of numerical methods for solution of the continuous variants of optimal control problems is termed unjustified, since the differential equations are usually replaced by difference equations in the numerical solution. The discrete variant is suggested as a more natural one, although the accuracy of approximation thus produced is open to question. Optimal control problems can then be analyzed as the limit in the sequence of finite-dimensioned problems of mathematical programming. It is shown that if the ordinary ideas of mathematical programming are applied to the difference analogs, specific results can be obtained for specific problems. The methods of solving the problem under phase limitations, problems of control by a complex of interconnected systems (centralization and decentralization problems)

UDC: 519.8

Card 1/2

L 06584-67

ACC NR: AP6011288

and problems of duality then become quite clear. The principle results of the work were given at a seminar on economic cybernetics and operations research which was held in March, 1965. Orig. art. has: 48 formulas.

SUB CODE: .13,12,09/ SUBM DATE: 29Oct65/ ORIG REF: 004/ OTH REF: 001

Card 2/2

34264

S/142/61/004/005/010/014
E192/E382

9.2300 (1160, 1164, 1385, 1150, 1154)

AUTHOR: Yermolayev, Yu.P.

TITLE: Analytical method of heat calculation in printed conductors

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiotekhnika, v.4, no. 5, 1961, 606 - 612

TEXT: It is assumed that in the printed circuit to be analyzed a thin conducting film is deposited on one side of a base plate. The thermal conductance of the conducting film can be neglected in a direction perpendicular to its plane. The heat flux in the state of equilibrium is therefore directed perpendicularly to the base plate and consists of two portions Q' and Q" (see Fig. 1). The basic equation for the thermal balance in the steady state is:

$$P_{KM} = \Theta / R_o$$

where P_{KM} is the quantity of heat dissipated from unit

Card 1/

Analytical method ....

surface per unit time (specific dissipation power), Θ is the temperature difference between the printed conducting element and the surrounding medium and R_o is the thermal resistance of unit surface. The resistance per unit surface can be expressed by:

$$R_o = \frac{\lambda + \alpha''\delta}{\alpha''\lambda + \alpha'\lambda + \alpha'\alpha''\delta}$$

where α' is the heat-transfer coefficient from the printed-element side
α'' is the heat-transfer coefficient for the insulating side of the base plate,
λ is the thermal-conductance coefficient of the base material and
δ is the thickness of the base plate.
The above formula is applicable to the most unfavourable case,

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Analytical method ....

when the base plate is horizontal and when the coefficients α' and α'' are low and different from each other. For this case, the coefficients α' and α'', as a function of temperature difference Θ, are plotted in Fig.2 (for the ambient temperature of 35 °C), α being expressed in W/cm² °C. In actual practice, the situation is different from that considered above in that a printed element is surrounded by an insulation zone, from which heat is conducted due to the thermal conductivity of the base. The thermal conductance through the base is analogous to the conductance through a cooling fin in heat exchangers. Consequently, the temperature distribution in the zones surrounding the conductor can be expressed by (Ref. 3: E.R. Ekkert - Introduction to the theory of heat- and mass-exchange, Gosenergoizdat, 1957):

$$\Theta_i = \Theta_r \cdot \frac{ch(\ell - x) \cdot m}{ch \ell \cdot m}$$

Card 3/05

Analytical method ....

where $m = \sqrt{2a/\lambda\delta}$ and the remaining prameters are illustrated in Fig. 4, which illustrates the temperature-distribution along the cross-section of the printed circuit. The heat distribution in this case can be expressed by:

$$\frac{p_o}{p_{KU}} = 1 + \frac{\sqrt{\delta}}{B}\sqrt{\frac{2\lambda}{a}} \cdot \text{th } ml \qquad (4)$$

where p_o is the power dissipated per cm^2 of the conductor surface, and

p_{KU} is the power dissipated directly from 1 cm^2 over the conductor without taking into account the thermal conduction of the surrounding zone.

Eq. (4) gives the increase in the specific dissipation power in the presence of the heat-conduction from the surface of the base plate surrounding the conductor. The above formulae can

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Analytical method ....

be used to determine the thermal conditions of a printed conductor providing the following parameters are known:
1) thermal conductance of the base material, λ ;
2) thickness of the plate, δ;
3) width of the conductor, B;
4) distance between the neighbouring conductors 2ℓ or the distance from the boundary of the base plate ℓ ;
5) specific dissipation power p_o , and
6) position of the plate.
With regard to the last requirement, it is recommended that the horizontal position of the plate be assumed, since this gives the most unfavourable conditions.
There are 4 figures, 2 tables and 4 Soviet-bloc references.

ASSOCIATION: Kafedra proizvodstva radioapparatury Kazanskogo aviatsionnogo instituta (Department of Radio-equipment Production of the Kazan' Aviation Institute)

SUBMITTED: February 17, 1961

Card 5/5

S/142/62/005/001/009/012
E073/E335

9.2190

AUTHOR: Yermolayev, Yu.P.

TITLE: Calculation and analysis of the accuracy of printed resistances as a function of the accuracy of printing the conducting and resistive films

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiotekhnika, v. 5, no. 1, 1962, 97 - 104

TEXT: The influence of inaccuracies in length and width of printed resistances is considered, assuming that the film of the resistance material is uniform and that the influence of the edges is negligible. Simple relations are derived and graphs are plotted to facilitate the practical use of this method. Inaccuracies in printing the resistance films and contact leads are considered. At a given printing accuracy an increase in the printing accuracy is most favourable in the case of short, wide resistances, i.e. for length-to-width ratios $L/B < 1$. If the printing accuracy is low, it is better to use narrow, long resistances. If the ratio of the accuracy of printing the leads to printing the resistances is known, the

Card 1/2

S/142/62/005/001/009/012
E073/E335

Calculation and analysis ....

optimum length-to-width ratio can be determined by means of the equation:

$$(L/B)_{optimum} = \Delta L/\Delta B$$

where ΔL and ΔB are, respectively, the length and width tolerances of the printed films. If L/B is smaller or larger than the optimum by a factor not greater than 2, the accuracy decreases only by 6-7%. However, if the deviation of this ratio from the optimum grows much larger, the accuracy of the printed resistances drops sharply (by 35% if the factor is 5 and by 75% if the factor is 10). There are 5 figures.

ASSOCIATION: Kafedra proizvodstva radioapparatury Kazanskogo aviatsionnogo instituta (Department for the Manufacture of Radio Apparatus of Kazan' Aviation Institute)

SUBMITTED: January 4, 1961

Card 2/2

YERMOLAYEV, Yu.P.

Features and efficient designs of printed resistances for subminiature equipment. Izv. vys. ucheb. zav.; radiotekh. 5 no.4:469-475 Jl-Ag '62. (MIRA 16:6)

1. Rekomendovana kafedroy proizvodstva radioapparatury Kazanskogo aviatsionnogo instituta.
(Miniature electronic equipment)

YERMOLAYEV, Yu.P.

High-resistance printed resistors in high-frequency networks. Izv.vys.ucheb.zav.; radiotekh. 5 no.6:714-722 N-D '62. (MIRA 16:1)

1. Rekomendovana kafedroy proizvodstva radioapparatury Kazanskogo aviatsionnogo instituta.
(Electric resistors) (Printed circuits)

ACCESSION NR: AP4012357 S/0142/63/006/006/0623/0627

AUTHOR: Yermolayev, Yu. P.

TITLE: Calculation and design of adjustable microelectronic film resistors

SOURCE: IVUZ. Radiotekhnika, v. 6, no. 6, 1963, 623-627

TOPIC TAGS: microelectronics, microsystem electronics, thin film resistor, resistor trimming, resistor tolerance, resistor accuracy, resistor, film resistor

ABSTRACT: Several procedures for individually trimming microelectronic film resistors are considered. These include either stepwise or gradual addition or removal of resistive film to an initially fixed resistor. The choice of the method is related to the required accuracy and permissible tolerance. It is concluded that such procedures ensure high accuracy even when the resistivity of

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ACCESSION NR: AP4012357

the film and the dimensional accuracy of the resistor contours are not reproducible with high precision. Orig. art. has: 8 figures.

ASSOCIATION: Kazanskiy aviatsionnyy institut (Kazan' Aviation Institute)

SUBMITTED: 03Dec62 DATE ACQ: 14Feb64 ENCL: 00

SUB CODE: GE, SD NO REF SOV: 000 OTHER: 000

Card 2/2

ACCESSION NR: AP4012358 S/0142/63/006/006/0628/0633

AUTHOR: Yermolayev, Yu. P.

TITLE: Calculation of optimal number of film elements on microcircuit plates

SOURCE: IVUZ. Radiotekhnika, v. 6, no. 6, 1963, 628-633

TOPIC TAGS: microelectronics, microsystem electronics, thin film element, integrated thin film circuit, manufacturing tolerance, microcircuit plate, microcircuit substrate, thin film circuit, film element

ABSTRACT: Although a thin film assembly with a large number of elements on a single plate has lower weight and dimensions and needs fewer manufacturing operations per element, failure of one element to meet specifications makes it necessary to reject an entire plate. A calculation procedure and a chart are given to help with the choice of the optimal number of elements on a plate with allowane for the probability that one of the elements may be faulty.

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ACCESSION NR: AP4012358

Plates with elements having the same and different types of elements (same or different probability of faulty manufacture) are considered. The probability with which similar elements vary from plate to plate is also taken into account. It is recommended that the procedure be applied to several different plate and element combinations.

ASSOCIATION: Kazanskiy aviatsionny*y institut (Kazan' Aviation Institute)

SUBMITTED: 09Jan63 DATE ACQ: 14Feb64 ENCL: 00

SUB CODE: SD, GE NO REF SOV: 000 OTHER: 000

Card 2/2

ACCESSION NR: AP4012359 S/0142/63/006/006/0634/0638

AUTHORS: Yermolayev, Yu. P.; Alimova, R. A.

TITLE: Calculation and analysis of the accuracy of microcircuit film capacitors

SOURCE: IVUZ. Radiotekhnika, v. 6, no. 6, 1963, 634-638

TOPIC TAGS: microelectronics, microsystem electronics, thin film capacitor, capacitor accuracy, capacitor tolerances, capacitor rating, capacitor

ABSTRACT: The errors in microelectronic film capacitor ratings due to imperfect overlap of the upper and lower electrodes are calculated, assuming constant dielectric thickness and area, and assuming that the dielectric extends beyond the limits of the two electrodes. Four variants of rectangular geometry are considered (Enclosure 01). It is shown that variant d is best from this point

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ACCESSION NR: AP4012359

of view, since the error in the centering of the mask for the lower electrode can be neglected. Square capacitors are best, the errors increasing with increasing ratio of the sides in the case of rectangular construction. Orig. art. has: 2 formulas and 7 graphs.

ASSOCIATION: Kazanskiy aviatsionny*y institut (Kazan' Aviation Institute)

SUBMITTED: 18Dec62 DATE ACQ: 14Feb64 ENCL: 01

SUB CODE: GE, SD NO REF SOV: 000 OTHER: 000

Card 2/2

YERMOLAYEV, Yu.P.

Calculation of the dissipation power of rectilinear printed resistances. Trudy FAI no.73:95-103 '63.

Small printed resistances in high-frequency circuits. Ibid.: 169-172

(MIRA 17:10)

ACCESSION NR: AP4043569 S/0146/64/007/004/0150/0154

AUTHOR: Khasanov, R. K.; Yermolayev, Yu. P.

TITLE: Stationary temperature field in a micromodule

SOURCE: IVUZ. Priborostroyeniye, v. 7, no. 4, 1964, 150-154

TOPIC TAGS: micromodule, temperature field, micromodule temperature field, temperature distribution, electronic equipment

ABSTRACT: The stationary field of a homogeneous isotropic cube (with a 1.2-cm edge) which simulated a micromodule is considered; also, the effects of the following factors on the field are analyzed: (1) variations of the shape and size of a single central heat source; (2) a high-thermal-conductance layer situated next to the heat source; (3) various deployments of heat sources in the module. These assumptions were made: (a) the source power does not vary with a variation of its configuration and place; (b) the temperature field of the source is uniform;

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ACCESSION NR: AP4043569

(c) the temperature at the body boundaries is the same. An approximate solution was performed on a 3-dimensional electric simulator which was subdivided into small cells; three electrical resistors represented each cell. It was found that inside overheating is largely dependent on the heat-source surface and negligibly dependent on its place. Orig. art. has: 3 figures and 2 formulas.

ASSOCIATION: Kazanskiy aviatsionny*y institut (Kazan' Aviation Institute)

SUBMITTED: 06Sep63 ENCL: 00

SUB CODE: EC NO REF SOV: 005 OTHER: 002

Card 2/2

L 10682-66 EWT(l)/EWA(h) TG

ACC NR: AP6000525 SOURCE CODE: UR/0142/65/008/005/0607/0611

AUTHOR: Yermolayev, Yu. P.; Kholopov, V. V.

ORG: none

TITLE: Evaluation of the complexity of film and hybrid microelectronic modules from the viewpoint of number and type of contact junctions

SOURCE: IVUZ. Radiotekhnika, v. 8, no. 5, 1965, 607-611

TOPIC TAGS: system reliability, microelectronic packaging

ABSTRACT: An analysis is presented of the complexity of microelectronic modules as it is affected by type and number of contacts and method of interconnection. Four types of contacts are considered: 1) contacts between film elements; 2) soldered or welded contacts between discrete components and film conductors; 3) soldered or welded contacts between conducting films and module outputs; and 4) soldered contacts between module outputs and printed-circuit wiring. Three methods of module interconnection are considered: 1) all modules are interconnected through printed-circuit wiring; 2) part of the module interconnections are made through printed-circuit wiring and part directly by jumper wires; and 3) all connections are made by jumper wires. Families of curves are given by which a designer may readily see how the percentage of acceptable (in the statistical sense) modules will be affected by inclusion or exclusion of a specific number of contacts of a particular type. Using the same

Card 1/2 UDC: 621.316.8-181.4

L 10682-66

ACC NR: AP6000525

graph, the designer may select the optimum mode of assembly with reference to module interconnection. Finally, the authors derive expressions for the optimum (in the sense of maximum module exploitation) number of modules for each of the three methods of interconnection. Orig. art. has: 2 figures and 14 formulas. [BD]

SUB CODE: 09, 14/ SUBM DATE: 18Dec64/ ATD PRESS: 4167

HW

Card 2/2

L 47572-66

ACC NR: AP6032163 SOURCE CODE: UR/0410/66/000/004/0050/0054

AUTHOR: Dmitriyev, V. D.; (Kazan'); Yermolayev, Yu. P. (Kazan'); Kholopov, V. V. (Kazan') 22 B

ORG: none

TITLE: The problem of increasing the accuracy of RC distributed parameter networks

SOURCE: Avtometriya, no. 4, 1966, 50-54

TOPIC TAGS: RC circuit, distributed parameter, CIRCUIT DESIGN

ABSTRACT: The problem of manufacturing distributed film RC networks with reproducible transfer characteristics is analyzed. The networks are made by vacuum deposition through masks of alternate rectangular layers of conductive, dielectric, and resistive materials. The problem of reproducibility arises when there is a spread in the mask apertures and their alignment. Fig. 1 illustrates some of these reproduction problems. Fig. 1a shows an uneven layer of resistive material (white) on the capacitance (hatched region). The RC product remains the same because whenever the resistance per unit length increases there is a corresponding decrease in per-unit capacitance; lateral mask misalignment is therefore not harmful. Fig. 1b shows the lower capacitance plate layer (hatched region L units long), a resistive layer (white region), film contacts attached to the resistance (hatched end areas), and the equivalent circuit for this ideal configuration. Fig. 1c shows that when the

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ACC NR: AP6032163

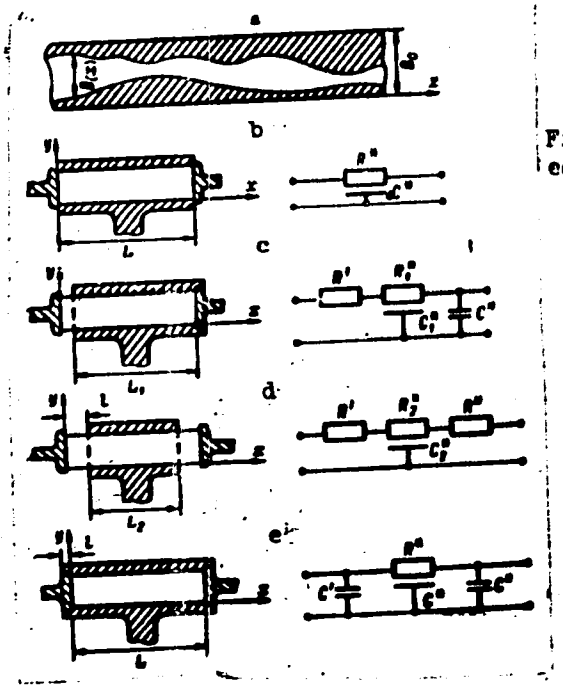

Fig. 1. Distributed RC networks with equivalent circuits.

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resistive layer and contact layers are misaligned, R' and C'' appear, respectively. To combat this problem, either the resistive layer is made to overlap the capacitive layer, (Fig. 1d), in which case the RC circuit acquires two bulk resistors (R' and R'') but the RC product remains as designed, or, preferably, the contact layer is made to overlap the resistive and lower capacitance plate layers, thus producing capacitances C' and C'', (Fig. 1e). Figs. 2 and 3 show the results of tests of RC

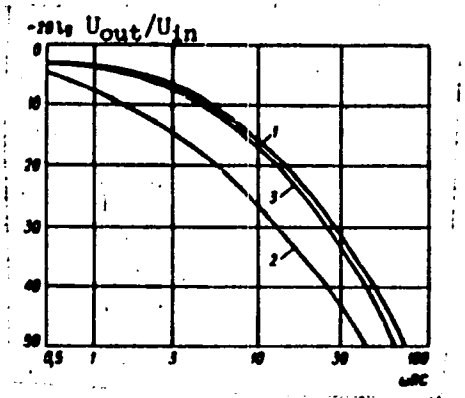

Fig. 2. Transfer characteristics for network of Fig. 1b.

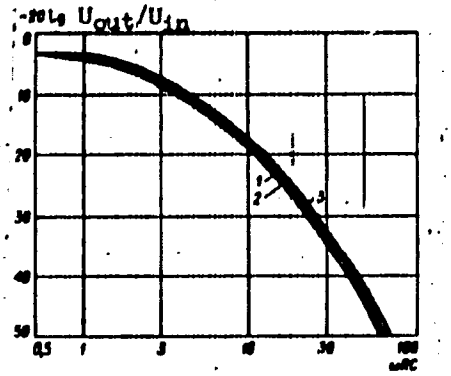

Fig. 3. Transfer characteristics for network of Fig. 1d.

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ACC NR: AP6032163 O

distributed networks (L = 10 mm) made according to the methods shown in Figs. 1b and 1c, respectively. Curve 1 in both figures corresponds to exact mask alignment; curves 2 and 3 correspond to maximum mask shift of 1 mm in the left and right directions. Orig. art. has: 2 formulas and 4 figures. [BD]

SUB CODE: 09/ SUBM DATE: 20Jan66/ ORIG REF: 001/ OTH REF: 001/ ATD PRESS: 5093

Card 4/4

L 02988-67 EWT(l)/EWT(m)/T/EWP(t)/ETI IJP(c) JD/GG
ACC NR: AP6033222 SOURCE CODE: UR/0142/66/009/004/0553/0557

AUTHOR: Yermolayev, Yu. P.

ORG: none

TITLE: The intermediate resistance of contacts between conducting and resistive thin films

SOURCE: IVUZ. Radiotekhnika, v. 9, no. 4, 1966, 553-557

TOPIC TAGS: microelectronic thin film, thin film circuit, METAL FILM, ELECTRIC RESISTANCE, ELECTRIC CONDUCTION

ABSTRACT: An attempt was made to establish analytically the dependence of intermediate resistance on 1) the geometry of transition contact areas between conducting and resistive thin films and 2) the physical properties of the thin films themselves. Formulas were derived for determining the geometry and size of the transition contact areas, with the assumptions that 1) an intermediate resistance, produced by the difference in materials and by the formation of oxide films and other impurities, exists between the conducting and resistive films in the contact area; 2) the resistance of the conducting film is relatively small and, as a result, the equipotential lines are along the boundary between the conducting and resistive films; and 3) electric field distortions in the contact area, caused by changes in the shape of the resistive films, are neglected. The effectiveness of the analytical method has been verified in experiments. Orig. art. has: 5 formulas and 3 figures.

SUB CODE: 09/ SUBM DATE: 29Mar65/ ORIG REF: 002/ ATD PRESS: 5099
UDC: 621.382.8

Card 1/1 awm

L 02985-67 EWT(m)/EWP(t)/ETI IJP(c) JD

ACC NR: AP6033217 SOURCE CODE: UR/0142/66/009/004/0497/0502

61
B

AUTHOR: Yermolayev, Yu. P.; Alimova, R. A.; Chepakhin, G. A.

ORG: none

TITLE: The influence of certain manufacturing factors on the accuracy of thin-film resistors and capacitors on a common substrate

19

SOURCE: IVUZ. Radiotekhnika, v. 9, no. 4, 1966, 497-502

TOPIC TAGS: thin film circuit, microelectronic thin film, circuit design, resistor, capacitor

25

ABSTRACT: The manufacture of precision thin-film resistors and capacitors on the same substrate by the vacuum evaporation method is analyzed. It is shown that with increasing distance from the center of the evaporant the specific resistance of films increases and that of capacitors decreases. The authors give a quantitative analysis of these phenomena based on a geometric interpretation, assuming a finite shadow mask thickness, absence of contaminating gas molecules, and perfect positioning of the mask on the substrate. The curves of specific resistance and capacitance variations as functions of the ratio of mask aperture to mask thickness are given. Equations approximating these curves at various distances from the center of the evaporant are presented. Methods are suggested for optimum geometrical distribution of elements in the thin-film circuit design to obtain maximum accuracy for the passive elements. Orig. art. has: 5 formulas and 5 figures.

SUB CODE: 09/ SUBM DATE: 22Feb63/ ORIG REF: 003/ ATD PRESS: 5099

UDC: 621.382.8.416

Card 1/1

CA YERMOLAYEVA, A.A.

New surface-active agents. A. A. Ermolaeva. *Tekstil. Prom.* 1949, No. 4, 25-8.—A no. of proprietary textile chemicals, chiefly sulfates and sulfonates, are compared. Quant. data are presented on their effects on surface tension, wetting power, stability to Ca salts, foam formation, and alk. scouring of fabrics. H. A.

YERMOLAYEVA, A.A.; LOBANOVA, M.I.

Selecting the new types of auxiliary preparations and their use in textile finishing. Nauch.-issl.trudy TSNIKHBI za 1958 g: 144-157. (MIRA 16:1)
(Textile finishing)

YERMOLAYEVA, A.A.; LAGODZINSKAYA, N.M.; LOBANOVA, M.I.

New surface-active substances. Nauch.-iss. trudy TSNIKHBI za 1962 g.:269-281 '64. (MIRA 18:8)

YERMOLAYEVA, A.D.

Work of the section on hygiene, microbiology and epidemiology of the Stalinsk Medical Society during 1957-1958. Gig.i san. 24 no.11:79-80 N '59. (MIRA 13:4)
(STALINSK PUBLIC HEALTH SOCIETIES)

YERMOLAYEVA, A.D.; BAZHIN, M.S.

Experience in conducting an over-all rat control campaign in a large city. Zhur. mikrobiol. epid. i immun. 31 no.7:137-140 Jl '60. (MIRA 13:9)

1. Iz Stalinskogo instituta usovershenstvovaniya vrachey i Gorodskoy sanitarno-epidemiologicheskoy stantsii.
(RATS--EXTERMINATION)

IVANOV, V.S.; YERMOLAYEVA, A.D.; SYROMYATNIKOV, K.A.

Device for the automatic determination of the carbamide content in a solvent. Khim.i tekh.topl.i masel 7 no.9:46-50 S '62. (MIRA 15:8)

1. Leningradskiy filial Spetsial'nogo konstruktorskogo byuro avtomatizatsii neftepererabotki i neftekhimii.
(Urea) (Paraffin wax)

LUKDINA, M.G., kand.tekhn.nauk; Prinimali uchastiye: LOSHLYAK, L.L., mladshiy nauchnyy sotrudnik; YERMOLAYEVA, A.I., mladshiy nauchnyy sotrudnik; SAFRONOVA, Z.A., mladshiy nauchnyy sotrudnik; RAUKHMAN, B.R., inzh.; METLITSKAYA, S.S.; SHISHKONOVA, L.I.; MURAV'YEVA, L.V.

Investigating the processing of clay in making bricks. Trudy NII Stroikeramiki no. 14:3-35 '59. (MIRA 14:1)

1. Obshchesoyuznyy nauchno-issledovatel'skiy institut stroitel'noy keramiki (for Loshlyak, Yermolayeva, Safronova). 2. Nachal'nik laboratorii Voronteovskogo kirpichnogo zavoda (for Shishkanova). 3. Nachal'nik laboratorii Nishne-Kotel'skogo kirpichnogo zavoda (for Shishkanova). 4. Nachal'nik laboratorii Moskovskogo eksperimental'nogo zavoda (for Murav'yeva).
(Clay)

LUNDINA, M.G., kand. tekhn. nauk; YERMOLAYEVA, A.I., inzh.

Color ceramic stone for finishing façades. Trudy NIIStroykeramiki no.24:128-132 '64. (MIRA 18:7)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001962820001-2"

YERMOLAYEVA, A.L., aspirant

Compared effectiveness of raising and keeping double-purpose chickens in cages. Ptitsevodstvo 9 no.8:33-36 Ag '59. (MIRA 12:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut ptitsevodstva.
(Poultry)

PATRIK, I.A., kand. sel'skokhoz. nauk; VINOGRADOVA, A.P., kand. sel'skokhoz. nauk; YERMOLAYEVA, A.L., mladshiy nauchnyy sotrudnik

Raising meat chicken in cages. Trudy TSNIIPPa 9:46-53 '62. (MIRA 16:6)

(Poultry industry)

YERMOLAYEVA, Antonina Nikitichna; ANTONENKO, Vera Vasil'yevna; KRYUCHKOVSKIY, Semen Arkad'yevich; VOLGAR', L.G., kand. biol. nauk, nauchn. red.; FEDYUSHINA, L.M., red.

[Biology for agriculture, Biochemistry, Biology and space; lists of recommended books] Biologiia - sel'skomu khoziaistvu, Khimiia zhizni, Biologiia i kosmos; rekomendatel'nye spiski literatury. Nauchn. red. L.G.Volgar'. Leningrad, 1963. 23 p. (Na temy dnia, no.7) (MIRA 17:2)

1. Leningrad. Publichnaya biblioteka.

VERMOLAYEVA, Antonina Nikitichna; KORNILOV, M.F., doktor sel'-khoz. nauk, nauchn. red.; TOLOCHINSKAYA, B.M., red.; KRYUCHKOVSKIY, S.A., red.

[Chemistry in agriculture; index of recommended literature for compulsory education in agrochemistry] Khimiia v sel'-skom khoziaistve; rekomendatel'nyi ukazatel' literatury v pomoshch' agrokhimicheskomu vseobuchu. Leningrad, 1964. 51 p. (MIRA 17:11)
1. Leningrad. Publichnaya biblioteka.

YERMOLAYEVA, E.N. (Kiyev)

Curvature of curves on a smooth surface in points where no second derivatives exist. Ukr. mat. zhur. 16 no.1:89-93 '64. (MIRA 17:5)

ADAS'KA, Galina [Adas'ka, Halina], brigadir; YERMOLAYEVA, F.P. [IErmalaieva, F.P.], agronom; DUDAREVA, Galina [Dudarava, Halina], dayarka

We shall carry out the decisions of the plenary session. Rab.i sial. 38 no.5:6-7 My '62. (MIRA 16:1)

1. Polevodcheskaya brigada kolkhoza im. Kirova, Baranovichskogo rayona (for Adas'ka). 2. Kolkhoz "Mayak kommunizma" Mogilevskogo rayona (for Yermolayeva). 3. Kolkhoz "Leninskaya iskra", Orshanskogo rayona (for Dudareva).

(Women as farmers)

SOV/133-58-8-5/30

AUTHORS: Sidyakov, P.V., Zarzhevskiy, N.Ya., and Yermolayeva, G.F.

TITLE: Ventilation of the Hot Blast Stove Houses of Blast Furnaces (Ventilyatsiya zdaniy vozdukhonagrevateley domennykh pechey)

PERIODICAL: Stal', 1958, Nr 8, pp 691 - 693 (USSR)

ABSTRACT: Various systems of ventilation of buildings partly enclosing hot blast stoves were investigated. On the basis of the results obtained, a ventilation system based on natural movement of air is recommended. There are 2 figures and 3 tables.

ASSOCIATION: Nauchno-issledovatel'skiy institut gigiyeny truda i profzabolevaniy (Scientific-research Institute of Labor Hygiene and Occupational Diseases)

Card 1/1 1. Structures--Ventilation 2. Furnaces--Equipment

KORCHAGIN, V.; YERMOLAYEVA, I.

Calendar for the work of a fruitgrower. Zashch. rast. ot vred. i bol. 10 no.5:37-38 '65. (MIRA 18:6)

1. Vystavka dostizheniy narodnogo khozyaystva SSSR.

KORCHAGIN, V.N.; YERMOLAYEVA, I.A.

Hexachloran in the control of the strawberry mite Steneotarsonemus pallidus. Zashch. rast. ot vred. i bol. 8 no.10:22-23 O '63. (MIRA 17:6)

1. Stantsiya zashchity rasteniy na Vystavke dostizheniy narodnogo khozyaystva SSSR.

KUZNETSOV, A.V.; PADUCHEVA, Ye.V.; YERMOLAYEVA, I.M.

Informational language for geometry and the algorism for translation from the Russian to the informational language. Soob. Otd.mekh.i avtom.inform.rab. no.?:40-73 '61. (MIRA 15:2)
(Programming languages (Electronic computers)--Geometry)

PIMENOV, V.I.; ARKHIPOV, P.I.; YEMMOLAYEVA, L.G.

Physicomechanical action exerted on felt footwear uppers in the process of rubber sole fastening by vulcanization. Mauch.-issl. trudy TSNIKP no.32:95-103 '60. (MIRA 15:12)
(Boots and shoes, Felt) (Vulcanization)

ACCESSION NR: AR4023356 S/0284/64/000/002/0013/0013

SOURCE: RZh. Voprosy* tekhnicheskogo progressa i organizatsii proizvodstva v mashinostroyenii, Abs. 2.35.69

AUTHOR: Gerasimova, N. V.; Yermolayeva, L. I.; Matyayeva, L. K.; Filippova, T. N.; Pervin, Yu. A.

TITLE: Programming methods for the automation of technological planning

CITED SOURCE: Tr. proyektn., tekhnol., i n.-i. in-ta. Volgo-Vyatsk. sovnarkhoz, vy*p. 2, 1963, 94-111

TOPIC TAGS: automatic programming, technological process, computer-controlled machine tools

TRANSLATION: An algorithm for the automatic planning of technological processes may be divided into two parts. The first incorporates the processing of the geometric information (blueprint data) to determine such features of a part as its shape and design characteristics essential for the technological process. The second part, the actual planning, reflects the production conditions. A program

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for the automatic planning of turning operations during piece-produced and small-series production has been investigated. Data about the surfaces of the part are fed into the memory of an URAL-2 electronic computer. A relatively small proportion of these data, needed in most subroutines, is stored in the operational memory. Data about the special features of the part are coded on magnetic tape (MT); they are retrieved into the operational memory only once during the compilation of the technological charts for the given part. The program for scanning the technological characteristics occupies 306 locations. The program for automatic planning includes the compilation of the following subroutines: the subroutine for path control in the processing of the given part; the auxiliary subroutine for branching to each operation; and subroutines specifying the tool, its geometry and cutting conditions. All these subroutines are recorded and stored on the MT. The subroutines for branching are retrieved from the MT in accordance with the operation code. Each subroutine determining the path control of the tool on the part requires 704 positions. The combined total volume of the program is about 10,000 positions. Using the first part of the algorithm one obtains the path control chart for the given part, and supplementary information for position changes and their parameters. On the basis of retrievals of the subroutines that determine the position changes in accordance with the operation

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ACCESSION NR: AR4023356

code, the operational chart is compiled and recorded on the MT. For parts of average complexity the overall time for compiling the program, including access to the MT, is about 3 minutes. A general block diagram of the program and block diagrams of the individual subroutines are given, together with the structure of the language for the characteristics of the part, and the storage layout. A. Proskuryakov.

DATE ACQ: 06Mar64 SUB CODE: IE, CP ENCL: 00

Card 3/3

KOVALENKO, V.M.; NIKIFOROV, I.N.; Prinimali uchastiye: VORONOVA, M.Ye.; KORNEYEVA, N.M.; UZBEKOVA, A.Kh.; YERMOLAYEVA, L.K.

New gasoline-, oil-, fat-, and water-resistant paint coatings. Lakokras. mat. i ikh prim. no.5:33-35 '63. (MIRA 16:11)

YERMOLAYEVA, L.M.

Effect of the length of daylight on the development of algae (Diei longitude et algarum vegetatio). Bot.mat.Otd.spor.rast. 9:39-46 My '53. (MLRA 7:2) (Algae)

YERMOLAYEVA, L.M.; SKRYABIN, K.I., akademik.

Development of auxospores in the algae Cyclotella Meneghiniana KTZ. Dokl. AN SSSR 91 no.1:165:168 Jl '53. (MLRA 6:6)

(Algae)

1. Akademiya nauk SSSR (for Skryabin)

YERMOLAYEVA, L.M.

New species of the genus Gomphonema Ag. Bot.mat.Otd.spor.rast. 11:149-50 Ja '56. (MLRA 9:11)
(Omsk Province--Diatoms)

YERMOLAYEVA, L.M.

USSR/General Biology - General Ecology and Hydrobiology. B-5

Abs Jour : Ref Zhur - Biologiya, No 7, 10 April 1957, 25975

Author : Yermolayeva, L.M.
Inst : Omsk Medical Institute
Title : A Hydrobiological and Hygienic Study of Two Kolkhoz Reservoirs in the Wooded Steppe Belt of the Omsk Oblast.

Orig Pub : Tr. Omskogo med. in-ta, 1956, No 19, 11-22

Abst : Descriptions are given of two artifical reservoirs, of their hydrological and physico-chemical characteristics, as well of the phyto- and zooplankton present and their seasonal variation, and of the samitary conditions obtaining in both reservoirs: one is suited for various farm and household uses and for the raising of carp, while the other cannot be used at the present time because of considerable contamination.

Bibliography of 17 titles.

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YERMOLAYEVA, L.M.

Significance of the length of the photoperiod for the development of Pediastrum. Bot.zhur. 45 no.7:1069-1073 Jl '60. (MIRA 13:7)

1. Omskiy meditsinskiy institut.
(Algae) (Photoperiodism)

YERMOLAYEVA, L. M.

Algae of dug ponds in Omsk Province and their efficient utilization. Nauch. dokl. vys. shkoly; biol. nauki no.3:105-108 '62. (MIRA 15:7)

1. Rekomendovana kafedroy biologii Omskogo meditsinskogo instituta.

(OMSK PROVINCE—ALGAE) (OMSK PROVINCE—FARM PONDS)

YERMOLAYEVA, L.M.

Food of the amphipod crustacean Gammarus lacustris Sars. Zool.zhur. 41 no.8:1257-1259 Ag '62. (MIRA 15:9)

1. The Department of Biology, The Meical Institute of Omsk. (Gammaridae)

YERMOLAYEVA, L.M.; FEDOROV, V.G.

Effect of gibberellin on the development of algae. Nauch. dokl. vys. chkoly; biol. nauki no.1:133-135 '64. (MIRA 17:4)

1. Rekomendovana kafedroy obshchey biologii Omskogo meditsinskogo instituta.

YERMOLAYEVA, L.M.

Development of algae in the new dammed-gully and dug ponds in Omsk Province. Bot.zhur. 49 no.11:1638-1644 N '64.

(MIRA 18:1)

1. Omskiy gosudarstvennyy meditsinskiy institut imeni M.I.Kalinina.

YERMOLAYEVA, L.M.; FEDOROV, V.D.

Brief survey of research on the algal population of the ponds of Western Siberia. Trudy TSSBS no.8:19-20 '64. (MIRA 18:7)

GERASIMOVA, N.V.; YERMOLAYEVA, L.N.; MATYAYEVA, L.K.; FILIPPOVA, T.N.; PERVIN, Yu.A.

Programming for the automation of technological designing. Trudy Proek. tekh. i nauch.-issl. inst. no.2:94-111 '63 (MIRA 17:7)

Yermolayeva, L.P.

20-2-37/60

AUTHORS: Yevreinova, T. N., Yermolayeva, L. P., Gerasimova, A. M.

TITLE: Purine and Pyrimidine Bases of the Thermophile Variety of Bacillus mycoides (Purinovyye i pirimidinovyye osnovaniya termofil'nogo varianta Bacillus mycoides)

PERIODICAL: Doklady AN SSSR, 1958, Vol. 118, Nr 2, pp. 334 - 337 (USSR)

ABSTRACT: It is to be assumed that thermophile microorganisms must have their chemical peculiarities. The chemism of life at high temperatures is, however, very little investigated. Many purine- and pyrimidine-bases are contained in the nucleic acids, nucleotids and nucleosides of the microbes. The former contain 3 groups and serve as sources of co-enzymes of a number of biological reactions and energy-rich phosphorus compounds (reference 4). It is of interest to determine which influence is exerted by the high temperature upon the total content of purine- and pyrimidine-bases. The thermophile proteolytic variety of Bacillus mycoides chosen as test object was isolated from the dregs of sewage which are fermented in thermophile vessels of methane production (reference 1). Table 1 gives the morphological characteristic of 2 cultures: a) at 58°C and b) at 44°C. The purine- and pyrimidine-bases were determined by distilling off of alcohol from alcohol-centrifugates. The chromato-

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graphic method on paper was used for this (references 8, 9). The 4-contents of the bases in the bacterial mass were determined (table 2). From this is to be seen that with an increase in temperature from 44 to 58°C the total amount of these bases decreases by about 38 %. The content of every individual basis in the culture cultivated at 58°C is smaller than at 44°C. The temperature is a factor which accelerates chemical enzymatic reactions, consequently also the biological processes. The decrease in these bases may here possibly be explained by the fact that the increased temperature partially replaces the enzymatic activity and the energy which were connected with the presence of the bases in the microorganisms. The following bases were determined: guanine, adenine, cytosin, uracyl, and thymine. There are 3 figures, 2 tables, and 9 references, 4 of which are Slavic.

ASSOCIATION: State University imeni M. V. Lomonosov, Moscow (Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova)
PRESENTED: September 6, 1957, by A. I. Oparin, Academician
SUBMITTED: September 6, 1957
AVAILABLE: Library of Congress

ZBARSKIY, I.B.; RAMENSKAYA, G.P.; MUL'MAN, L.S.; YERMOLAYEV, L.P.

Concentration and nucleotide composition of nucleic acids in the ontogeny of the silkworm Bombyx mori. Zhur.ob.biol. 20 nl.6:428-438 N-D '59. (MIRA 13:4)

1. Institut morfologii zhivotnykh im. A.N. Severtsova AN SSSR.
(SILKWORMS) (NUCLEIC ACIDS)

ZBARSKIY, I.B.; YERMOLAYEVA, L.P.

Characteristics of nuclear nucleoproteins of certain tissues. Biokhimiia 25 no.1:112-117 Ja-F '60. (MIRA 13:6)

1. Institute of Animal Morphology, Academy of Sciences of the U.S.S.R., Moscow.
(NUCLEOPROTEINS chem.)

ZBARSKIY, I.B.; YERMOLAYEVA, L.P.

Composition of spermatozoon nuclei in the Baltic salmon. Dokl. AN SSSR 140 no.1:240-243 S-O '61. (MIRA 14:9)

1. Institut morfologii zhivotnykh im. A.N.Severtsova AN SSSR. Predstavleno akademikom A.I.Oparinym.
(SPERMATOZOA) (CELL NUCLEI) (PROTEINS IN THE BODY)

ZBARSKIY, I.B.; YERMOLAYEVA, L.P.; DMITRIYEVA, N.P.

Residual proteins in nuclei of normal and tumor cells. Vop. med. khim. 8 no.2:218-221 Mr-Ap '62. (MIRA 15:4)

1. Institut morfologii zhivotnykh imeni A.N.Severtsova AN SSSR, Moskva.
(CANCER) (PROTEIN METABOLISM) (CELL NUCLEI)

ZBARSKIY, I.B.; DMITRIYEVA, N.F.; YERMOLAYEVA, L.P.

Characteristics of the nuclear structure of tumor cells.
Tsitologiia 5 no.5:499-506 S-O '63. (MIRA 17:4)

1. Laboratoriya biokhimii kletochnykh struktur i Laboritoriya tsitologii Instituta morfologii zhivotnykh AN SSSR, Moskva.

ZBARSKIY, I. B.; KHRUSHCHOV, N. G.; YERMOLAYEVA, L. P.

"On the composition and biological role of the nucleolus-associated heterochromatin."

report submitted for 2nd Intl Cong, Histochemistry & Cytochemistry, Frankfurt, 16-21 Aug 64.

Inst of Animal Morphology, AS USSR, Vavilov Street 12/2, Moscow B-133.

YERMOLAYEVA, L. P.; ZBARSKIY, I. B.; KHRUSHCHEV, N. G.

"On the Existence and Intranuclear Localization of a DNA fraction differing by its Base Composition from Total Cellular DNA."

report to be presented at the 6th Intl Biochemistry Cong, New York City, 26 Jul-1 Aug 1964.

ZBARSKIY, I.B.; YERMOLAYEVA, L.P.; KHRUSHCHOV, N.G.

Characteristics of the nucleotide composition of DNA of the perinucleolic chromatin. Dokl. AN SSSR 157 no.1:175-177 Jl '64
(MIRA 17:8)

1. Predstavleno akademikom A.I. Oparinym.

GEORGIYEV, G.P.; YERMOLAYEVA, L.P.; ZBARSKIY, I.B.

Quantitative interrelationship between protein and nucleoprotein fractions in cell nuclei of various tissues. Biokhimiia 25 no.2: 318-322 Mr-Ap '60. (MIRA 14:5)

1. Institut morfologii zhivotnykh im. A.N.Severtsova Akademii nauk SSSR, Moskva.
(PROTEINS IN THE BODY) (CELL NUCLEI)

ZBARSKIY, I.B.; YERMOLAYEVA, L.P.

Characteristics of nuclear nucleoproteins of some experimental tumors and of chick embryos. Biul. eksp. biol. i med. 50 no.10:64-67 O '60. (MIRA 14:5)

1. Iz gruppy biokhimii kletochnykh struktur (zav. - prof. I.B. Zbarskiy) Instituta morfologii zhivotnykh imeni A.N.Severtseva (dir. - chlen-korrespondent AN SSSR prof. G.K.Khrushchov) AN SSSR Moskva. Predstavlena deystvitel'nym chlenom AMN SSSR S.Ye. Severinym.

(NUCLEOPROTEINS)

YERMOLAYEVA, M.I.

2

S/193/60/000/012/006/018
A004/A001

AUTHORS: Shlyapin, V. B., Vinogradov, Yu. G., Leont'yev, D. V., Rovkakh, S. Ye., Kolesnichenko, A. N., Yermolayeva, M. I.

TITLE: Vibration-Arc Build-Up of Parts With the Aid of the Automatic АНКЭФ-1 (ANKEF-1) Head

PERIODICAL: Byulleten' tekhniko-ekonomicheskoy informatsii, 1960, No. 12, pp. 20-21

TEXT: The Tsentral'nyy nauchno-issledovatel'skiy institut putey soobshcheni-
ya (Central Scientific Research Institute of Transport) (TsNII MPS) has developed
a new method of submerged vibration arc building-up of shaft journals of the
rolling stock. A thin metal layer of 0.3 - 3 mm is built up without cracks, pores
and slag impurities. The building-up equipment, the special automatic ANKEF-1
head, was manufactured in cooperation with the design and planning office of the
Glavstroymekhanizatsiya Ministerstva transportnogo stroitel'stva (Glavstroymekha-
nizatsiya of the Ministry of Transport Engineering). The part being built up is
clamped in the centers of a lathe and rotates with a speed of 1-5 rpm while the
metal is welded on with the ANKEF-1 head shown in the illustration. The head is
actuated by the АОЛ-11-2 (AOL-11-2) 180 w electromotor 1 which also feeds the

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electrode wire to the part and produces the vibrations with the aid of worm reducer 2. Nozzle 3 carries out oscillations parallel to ellipsoid axis. The vibrator consists of an axle and two eccentrically located bushings 4. The axis of the outer bushing is displaced relative to the inner one by 1.5 mm, so that the total eccentricity can be varied from 0 to 3 mm. The nozzle is connected to rocker 5. At the end of the axis of the eccentric mechanism a driven shaw bevel wheel is mounted which is geared to the toothed wheel of the worm shaft of the reducer. The set

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of toothed wheels makes it possible to vary the number of nozzle oscillations in the range of 20 - 57 cps. Electrode wire feed mechanism 6 is mounted on a plate fastened to the reducer housing. The driving roll for the wire feed is made of two disks and a set of rubber rings tightened by nut 7. The electrode wire is fed to the part being built up from magazine 8. The feed speed can be varied between 57 and 236 m/hour. The ANKEF-1 head has a special prop 9 by which it is fastened to the cross slide of lathe. By the screw, connecting the head with the prop, the former can be lifted by 200 mm from its lower position. A cylindrical hinge over the screw makes it possible to tilt the head around its horizontal axis through 150°, while it can be swiveled around its vertical axis through 360°. The overall dimensions of the head (height x length x width) are 600 x 560 x 200 mm, it weighs 30 kg. For building-up operations with the ANKEF-1 heads the standard flux grades АН-348 (AN-348) or ОСЦ-45 (OSTs-45) are used. The repair costs of parts reconditioned by building-up amount to 10 - 30% of the manufacturing costs. There is 1 figure.

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SHLYAPIN, V.B.; VINOGRADOV, Yu.G.; LEONT'YEV, D.V.; ROVKAKH, S.Ye.; KOLESNICHENKO, A.N.; YEMOLAYEVA, M.I.

Using the AKSB-1 automatic head in building up parts by the weaving arc method. Biul.tekhn.-ekon.inform. no.12:20-21 '60. (MIRA 13:12)

(Electric welding)

YERMOLAYEVA, N.F., inzhener.

Inventions and innovations in ferrous metallurgy. Stal' 7 no.1: 74-78 '47. (MLRA 9:1)

1.Ministerstvo chernoy metallurgii.
(Metallurgy)

VIKHAREV, Boris Semenovich. Prinimal uchastiye IVANOV, A.D.; YEMOLAYEVA, N.G., red.; VORONTSOVA, Z.Z., tekhn. red.

Izhevsk. Izhevsk, Udmurtskoe knizhnoe izd-vo 1963. 124 p. (MIRA 17:3)

1. Predsedatel' Izhevskogo gorodskogo ispolnitel'nogo komiteta (for Ivanov).

RYBIN, S.F., otv. red.; STOROZHEV, N.A., red.; KIRISOV, A.G., red.; KYCHANOVA, N.I., red.; POPOV, Yu.K., red.; KOVRIGO, V.P., red.; YERMOLAYEVA, K.G., red.

[The Udmurt land; collection of articles, stories, and verses about nature in the Udmurt A.S.S.R.] Krai Udmurtskii; sbornik statei, rasskazov, stikhov o prirode Udmurtii, Izhevsk, Udmurtskoe knizhnoe izd-vo, 1963. 75 p. (MIRA 18:2)

1. Vserossiyskoye obshchestvo sodeystviya okhrane prirody. Udmurtskoye otdeleniye.

KIRILLOV, N.I.; YERMOLAYEVA, N.I.; KRUPENIN, L.K.; KIRILLOVA, N.Ye.

Investigating the hardening of positive color film during its processing. Zhur.nauch.i prikl. fot. i kin. 6 no.2:81-86 Mr-Ap '61. (MIRA 14:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy kinofotoinstitut.
(Color photography—Films)

S/044/61/000/008/001/039
C111/C333

AUTHORS: Yermolayeva, N. M. Shikhanovich, Yu. A.

TITLE: The problem of establishing a mechanical language for the geometry

PERIODICAL: Referativnyy zhurnal, Matematika, no. 8, 1961, 11, abstract 8A79 ("Soobshch. Labor. elektromodelir. In-t nauchn. inform. AN SSSR," 1960, vyp 1, 211-215)

TEXT: Short description of the lecture given by the authors at the conference mentioned in Ref. 8A80. The fundamental demands usually postulated for the projected mechanical information languages are explained by the example of the mechanical language for the geometry elaborated by the authors.

[Abstracter's note: Complete translation.]

Card 1/1

L 19436-63 BDS
ACCESSION NR: AR3005392 S/0044/63/000/006/V067/V067

SOURCE: RZh. Matematika, Abs. 6V376

AUTHOR: Yermolayeva, N. M.

TITLE: Computer control of device circuits

CITED SOURCE: Sb. Vychisl. i inform. tekhnika, M, 1962, 123-124

TOPIC TAGS: computer theory, device circuit control, digital computer, functional element

TRANSLATION: The circuit is broken down into functional elements (f.e.) operating discretely and having no more than two distinct inputs and one output. Subroutines are devised which describe the operation of each f.e. The basic routine is constructed in the form of three tables in accordance with the links among the f.e. The basic routine indicates the f.e. whose state in each cycle must be stored in the memory cells and then printed for control purposes. The routine was checked on the LEM-I-24 universal digital computer. M. Grinev.

DATE ACQ: 24Jul63 SUB CODE: CP ENCL: 00

Card 1/1

UDRAS, G.Ya.; YERMOLAYEVA, N.N.; REMIZOVA, A.M.

Methodology for setting the expenditure norms of material resources in the production of technical rubber products. Kauch. i rez. 24 no.5: 40-43 My '65. (MIRA 18:9)

1. Nauchno-issledovatel'skiy institut rezinovoy promyshlennosti.

UDRAS, G.Ya.; YERMOLAYEVA, N.N.; REMIZOVA, A.M.

Determining the coefficient of area changes in textile materials in rubberizing and coating with rubber compounds on calenders. Kauch. i rez. 24 no.9:46-48 '65. (MIRA 18:10)

1. Nauchno-issledovatel'skiy institut rezinovoy promyshlennosti.

YERMOLAYEVA, N. P.

PHASE I BOOK EXPLOITATION SOV/4199

Leningrad. Politekhnicheskiy institut

Sovremennyye dostizheniya liteynogo proizvodstva; trudy mezhvuzovskoy nauchno-tekhnicheskoy konferentsii (Recent Achievements in Founding: Transactions of the Scientific and Technical Conference of Schools of Higher Education) Moscow, Mashgiz, 1960. 336 p. Errata slip inserted. 4,000 copies printed.

Resp. Ed.: Yu. A. Nekhendzi, Doctor of Technical Sciences, Professor; Eds.: N. G. Girshovich, Doctor of Technical Sciences, Professor, and K. P. Lebedev, Docent; Managing Ed. for Literature on Heavy Machine Building (Leningrad Department, Mashgiz): Ye. P. Naumov, Engineer; Tech. Eds.: Ye. A. Dlugokanskaya, and L. V. Shchetinina.

PURPOSE: This book is intended for the technical personnel of foundries. It may be used by students of the field.

COVERAGE: This collection of articles discusses problems in founding processes. Individual articles treat the melting of metals and their alloys, mechanization and automation of casting processes, aspects of the manufacture of steel, cast iron, and nonferrous metal castings. No personalities are mentioned. References accompany individual articles.

Recent Achievements in Founding (Cont.) SOV/4199

Card 7/9

YERMOLENKO, N.F.; LEVINA, S.A.; MALASHEVICH, L.N.

Cation exchange of bivalent metals on a synthetic 13X-type zeolite. Dokl. AN BSSR 7 no.11:756-759 N '63. (MIRA 17:9)

1. Institut obshchey i neorganicheskoy khimii AN BSSR.

VELIKANOV, K.M.; YERMOLAYEVA, N.T.

Method of calculating the economic efficiency of the organization of an alternating continuous line for making turbine-blade forgings. Trudy LPI no.244:74-84 '65.

Calculating the economic efficiency of the technology of the heat treatment of metal-cutting tools. Ibid.:85-93

(MIRA 18:5)

TOROPOVA, G.P., YERMOLAYEVA, E.V.

Physicochemical changes in desoxyribonucleic acid in tissues of irradiated animals [with summary in English]. Med.rad. 3 no.5: 24-29 S-O '58 (MIRA 11:12)

(LIVER, eff. of radiations,
x-rays on desoxyribonucleic acid metab. (Rus))
(INTESTINES, SMALL, eff. of radiations,
same (Rus))
(ROENTGEN RAYS, eff.
on liver & small intestine desoxyribonucleic acid metab. (Rus))
(DESOXYRIBONUCLEIC ACIDS, metab.
liver & small intestine, eff. of x-rays (Rus))

YERMOLAYEVA, N.V.

Nucleic acid concentration in cell components of the mucosa of the small intestine following gamma irradiation. Biokhimiia 25 no.4: 875-878 Jl-Ag '60. (MIRA 13:11)
(NUCLEIC ACIDS) (CELLS)
(GAMMA RAYS—PHYSIOLOGICAL EFFECT)

YERMOLAYEVA, N. V. (USSR)

"The Influence of γ-Irradiation on the Enzymatic Degradation of Desoxyribonucleoproteins."

Report presented at the 5th International Biochemistry Congress, Moscow, 10-16 August 1961

YERMOLAYEVA, N.V.

Enzymatic decomposition of desoxyribonucleoproteins of the appendix following whole-body gamma irradiation. Radiobiologiia 1 no.5:670-675 '61. (MIRA 14:11)

(NUCLEOPROTEINS) (GAMMA RAYS--PHYSIOLOGICAL EFFECT)

KOLESNIKOV, I.S.; YERMOLAYEV, V.R.; SOKOLOV, S.N.; MEZHEVIKIN, N.I.

Resection of the basal segments of the lungs. Grud. khir. 5 no.5:46-51 S-O '63. (MIRA 17:8)

1. Iz kafedry gospital'noy khirurgii (nachal'nik - prof. I.S. Kolesnikov) Voyenno-meditsinskoy ordena Lenina akademii imeni Kirova. Adres avtorov: Leningrad K-9, Botkinskaya ul., d.23, Klinika gospital'noy khirurgii Voyenno-meditsinskoy ordena Lenina akademii.

KOLESNIKOV, I.S., prof.; YERMOLAYEV, V.R.; kand. med. nauk; SOKOLOV, S.N., kand. med. nauk

Surgical anatomy and technique of resection of the lingular segments of the left lung. Vest. khir. 91 no.12:27-32 D '63. (MIRA 17:9)

1. Iz 1-y gospital'noy khirurgicheskoy kliniki (nachal'nik - prof. I.S. Kolesnikov) i kafedry operativnoy khirurgii (nachal'nik - prof. A.N. Maksimenkov) Voyenno-meditsinskoy ordena Lenina akademii imeni Kirova. Adres avtorov: Leningrad, K-9, Botkinskaya ulitsa, 23, klinika gospital'noy khirurgii Voyenno-meditsinskoy ordena Lenina akademii imeni Kirova.

KOLESNIKOV, I.S., prof.; YEMMOLAYEV, V.R.; SOKOLOV, S.N.; MEZHEVITIN, N.I.

Resection of the mediobasal segment of the lung. Vest. khir. 92 no.4:16-21 Ap '64 (MIRA 18:1)

1. Iz gospital'noy khirurgicheskoy kliniki (nachal'nik - prof. I.S. Kolesnikov) i kafedry operativnoy khirurgii i topograficheskoy anatomii (nachal'nik - prof. A.N. Maksimenkov) Voyenno-meditsinskoy ordena Lenina akademii imeni S.M. Kirova. Adres avtorov: Leningrad, K-9, Botkinskaya ul, 23, gospital'naya khirurgicheskaya klinika Voyenno-meditsinskoy ordena Lenina akademii imeni S.M. Kirova.

KEPENKO, A.T., red.; GURVICH, M.S., red.; GINZBURG, A.S., red.; YERMOLAYEV, V.V., red.; ZHUK, A.A., red.; USPENSKIY, V.V., red.; NEMOV, G.A., red.izd-va; TEMKINA, Ye.L., tekhn.red.; KORNEYEVA, V.I., tekhn.red.

[Section on the economics of the construction industry] Sektsiia ekonomiki stroitel'stva. Moskva, Gosstroiizdat, 1958. 369 p. (MIRA 12:6)

1. Vsesoyuznoye soveshchaniye po stroitel'stvu, 3rd, Moscow, 1958. (Construction industry--Costs)

YERMOLAYEV, V. Yu.; CHERNIGOVSKIY, V.N., akademik

Participation of some structures of the limbic system in the transmission of visceral and somatic signalization. Dokl. AN SSSR 159 no.3:686-689 N '64 (MIRA 18:1)

1. Institut fiziologii imeni I.P.Pavlova AN SSSR.

VOLIK, Yuriy Prokof'yevich; YERMOLAYEV, Yevgeniy Nikolayevich; CHESNOKOV, Viktor Kuz'mich; STEL'MAKOV, S.M., red.; FREGER, D.P., red. izd-va; BELOGUROVA, I.A., tekhn. red.

[Ejecting device for forging on crankshaft presses: stenographic record of a lecture course]Vytalkivaiushchie ustroistva pri shtampovke na krivoshipnykh goriacheshtampovochnykh pressakh; stenogramma lektsii. Leningrad, 1962. 26 p. (MIRA 15:8)

(Forging) (Power presses)

AID P - 4637

Subject : USSR/Aeronautics - education

Card 1/1 Pub. 135 - 3/26

Author : Yermolayev, Yu. A., Guards Cpt.

Title : From the experience in educational work of squadron commanders.

Periodical : Vest. vozd. flota, 5, 12-15, My 1956

Abstract : It is stressed by the author that in the interest of better training the squadron commander and his closest assistants should pay more attention to the study of their subordinates in order to learn more about their character, abilities, behavior and tendencies. The article is of no particular interest.

Institution : None

Submitted : No date

16.1500

S/020/60/132/02/04/067

AUTHOR: Yermolayev, Yu. B.

TITLE: Simultaneous Reduction of a Pair of Bilinear Forms to the Standard Expression

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 132, No. 2, pp. 257-259

TEXT: The author considers the pair of bilinear forms

$$(1) \qquad \begin{aligned} A(x,y) &= x'Ay \\ B(x,y) &= x'By, \end{aligned}$$

where the matrices A and B are so that $A' = \alpha A$, $B' = \beta B$ ($\alpha^2 = \beta^2 = 1$). Let V_1 and V_2 be linear vector spaces over the same field. The pair (A_1,B_1) is assumed to be defined on V_1, the pair (A_2,B_2) on V_2. By the direct sum of the pairs (A_1,B_1) and (A_2,B_2) the author understands a pair of forms (A, B) which is defined on $V = V_1 + V_2$ by

$$A(x_1 + x_2, y_1 + y_2) = A_1(x_1, y_1) + A_2(x_2, y_2)$$
$$B(x_1 + x_2, y_1 + y_2) = B_1(x_1, y_1) + B_2(x_2, y_2)$$

Card 1/2

S/020/60/132/02/04/067

Simultaneous Reduction of a Pair of Bilinear Forms to the Standard Expression

$x_1, y_1 \in V_1$; $x_2, y_2 \in V_2$.

The author proves that an arbitrary pair of bilinear forms with aforementioned properties is uniquely representable as a direct sum of quite specific (explicitly given) pairs of forms. He obtains a similar result for the pair of forms

$$(4) \qquad \begin{matrix} A(x,y) = x'Ay \\ H(x,y) = x'H\bar{y} \end{matrix}$$

where $A' = \alpha A$, $\alpha = \pm 1$ and H is a Hermitean matrix; both are given on the n-dimensional vector space over the field of complex numbers. There are 2 references: 1 Soviet and 1 American.

ASSOCIATION: Kazanskiy gosudarstvennyy universitet imeni V. J. Ul'yanova - Lenina (Kazan' State University imeni V. J. Ul'yanov - Lenin)

PRESENTED: January 12, 1960, by A. J. Mal'tsev, Academician

SUBMITTED: January 6, 1960

Card 2/2

L 06584-67 EWP(k)/EWT(d)/EWP(h)/EWP(1)/EWP(v)

ACC NR: AP6011288 SOURCE CODE: UR/0378/66/000/001/0072/0078

AUTHOR: Yermol'yev, Yu. M.; Gulenko, V. P.

36
8

ORG: none

14

TITLE: Numerical methods of solving optimal control problems

SOURCE: Kibernetika, no. 1, 1966, 72-78

TOPIC TAGS: optimal automatic control, computer programming, difference equation .

ABSTRACT: This article primarily illustrates the capabilities resulting from analysis of difference analogs in optimal control problems as a specific problem in mathematical programming. The time spent on development of numerical methods for solution of the continuous variants of optimal control problems is termed unjustified, since the differential equations are usually replaced by difference equations in the numerical solution. The discrete variant is suggested as a more natural one, although the accuracy of approximation thus produced is open to question. Optimal control problems can then be analyzed as the limit in the sequence of finite-dimensioned problems of mathematical programming. It is shown that if the ordinary ideas of mathematical programming are applied to the difference analogs, specific results can be obtained for specific problems. The methods of solving the problem under phase limitations, problems of control by a complex of interconnected systems (centralization and decentralization problems)

UDC: 519.8

Card 1/2

L 06584-67

ACC NR: AP6011288 O

and problems of duality then become quite clear. The principle results of the work were given at a seminar on economic cybernetics and operations research which was held in March, 1965. Orig. art. has: 48 formulas.

SUB CODE: .13,12,09/ SUBM DATE: 29Oct65/ ORIG REF: 004/ OTH REF: 001

Card 2/2

34264

S/142/61/004/005/010/014
E192/E382

9.2300 (1160, 1164, 1385, 1150, 1154)

AUTHOR: Yermolayev, Yu.P.

TITLE: Analytical method of heat calculation in printed conductors

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiotekhnika, v.4, no. 5, 1961, 606 - 612

TEXT: It is assumed that in the printed circuit to be analyzed a thin conducting film is deposited on one side of a base plate. The thermal conductance of the conducting film can be neglected in a direction perpendicular to its plane. The heat flux in the state of equilibrium is therefore directed perpendicularly to the base plate and consists of two portions Q' and Q" (see Fig. 1). The basic equation for the thermal balance in the steady state is:

$$p_{KM} = \Theta / R_o$$

where p_{KM} is the quantity of heat dissipated from unit

Card 1/

Analytical method ....

surface per unit time (specific dissipation power), Θ is the temperature difference between the printed conducting element and the surrounding medium and R_o is the thermal resistance of unit surface. The resistance per unit surface can be expressed by:

$$R_o = \frac{\lambda + \alpha''\delta}{\alpha''\lambda + \alpha'\lambda + \alpha'\alpha''\delta}$$

where α' is the heat-transfer coefficient from the printed-element side
α'' is the heat-transfer coefficient for the insulating side of the base plate,
λ is the thermal-conductance coefficient of the base material and
δ is the thickness of the base plate.
The above formula is applicable to the most unfavourable case,

Analytical method ....

when the base plate is horizontal and when the coefficients α' and α'' are low and different from each other. For this case, the coefficients α' and α'', as a function of temperature difference Θ, are plotted in Fig.2 (for the ambient temperature of 35 °C), α being expressed in W/cm² °C. In actual practice, the situation is different from that considered above in that a printed element is surrounded by an insulation zone, from which heat is conducted due to the thermal conductivity of the base. The thermal conductance through the base is analogous to the conductance through a cooling fin in heat exchangers. Consequently, the temperature distribution in the zones surrounding the conductor can be expressed by (Ref. 3: E.R. Ekkert - Introduction to the theory of heat- and mass-exchange, Gosenergoizdat, 1957):

$$\Theta_i = \Theta_r \cdot \frac{ch(\ell - x) \cdot m}{ch \ell \cdot m}$$

Card 3/05

Analytical method ....

where $m = \sqrt{2a/\lambda\delta}$ and the remaining prameters are illustrated in Fig. 4, which illustrates the temperature-distribution along the cross-section of the printed circuit. The heat distribution in this case can be expressed by:

$$\frac{p_o}{p_{KU}} = 1 + \frac{\sqrt{\delta}}{B}\sqrt{\frac{2\lambda}{a}} \cdot \text{th } m\ell \qquad (4)$$

where p_o is the power dissipated per cm^2 of the conductor surface, and

p_{KU} is the power dissipated directly from 1 cm^2 over the conductor without taking into account the thermal conduction of the surrounding zone.

Eq. (4) gives the increase in the specific dissipation power in the presence of the heat-conduction from the surface of the base plate surrounding the conductor. The above formulae can

Card 4/6

Analytical method ....

be used to determine the thermal conditions of a printed conductor providing the following parameters are known:
1) thermal conductance of the base material, λ ;
2) thickness of the plate, δ;
3) width of the conductor, B;
4) distance between the neighbouring conductors 2ℓ or the distance from the boundary of the base plate ℓ ;
5) specific dissipation power p_o , and
6) position of the plate.

With regard to the last requirement, it is recommended that the horizontal position of the plate be assumed, since this gives the most unfavourable conditions.
There are 4 figures, 2 tables and 4 Soviet-bloc references.

ASSOCIATION: Kafedra proizvodstva radioapparatury Kazanskogo aviatsionnogo instituta (Department of Radio-equipment Production of the Kazan' Aviation Institute)

SUBMITTED: February 17, 1961

S/142/62/005/001/009/012
E073/E335

9.2190

AUTHOR: Yermolayev, Yu.P.

TITLE: Calculation and analysis of the accuracy of printed resistances as a function of the accuracy of printing the conducting and resistive films

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiotekhnika, v. 5, no. 1, 1962, 97 - 104

TEXT: The influence of inaccuracies in length and width of printed resistances is considered, assuming that the film of the resistance material is uniform and that the influence of the edges is negligible. Simple relations are derived and graphs are plotted to facilitate the practical use of this method. Inaccuracies in printing the resistance films and contact leads are considered. At a given printing accuracy an increase in the printing accuracy is most favourable in the case of short, wide resistances, i.e. for length-to-width ratios $L/B < 1$. If the printing accuracy is low, it is better to use narrow, long resistances. If the ratio of the accuracy of printing the leads to printing the resistances is known, the

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S/142/62/005/001/009/012
E073/E335

Calculation and analysis ....

optimum length-to-width ratio can be determined by means of the equation:

$$(L/B)_{optimum} = \Delta L/\Delta B$$

where ΔL and ΔB are, respectively, the length and width tolerances of the printed films. If L/B is smaller or larger than the optimum by a factor not greater than 2, the accuracy decreases only by 6-7%. However, if the deviation of this ratio from the optimum grows much larger, the accuracy of the printed resistances drops sharply (by 35% if the factor is 5 and by 75% if the factor is 10). There are 5 figures.

ASSOCIATION: Kafedra proizvodstva radioapparatury Kazanskogo aviatsionnogo instituta (Department for the Manufacture of Radio Apparatus of Kazan' Aviation Institute)

SUBMITTED: January 4, 1961

Card 2/2

YERMOLAYEV, Yu.P.

Features and efficient designs of printed resistances for subminiature equipment. Izv. vys. ucheb. zav.; radiotekh. 5 no.4:469-475 Jl-Ag '62. (MIRA 16:6)

1. Rekomendovana kafedroy proizvodstva radioapparatury Kazanskogo aviatsionnogo instituta.
(Miniature electronic equipment)

YERMOLAYEV, Yu.P.

High-resistance printed resistors in high-frequency networks. Izv.vys.ucheb.zav.; radiotekh. 5 no.6:714-722 N-D '62. (MIRA 16:1)

1. Rekomendovana kafedroy proizvodstva radioapparatury Kazanskogo aviatsionnogo instituta.
(Electric resistors) (Printed circuits)

ACCESSION NR: AP4012357 S/0142/63/006/006/0623/0627

AUTHOR: Yermolayev, Yu. P.

TITLE: Calculation and design of adjustable microelectronic film resistors

SOURCE: IVUZ. Radiotekhnika, v. 6, no. 6, 1963, 623-627

TOPIC TAGS: microelectronics, microsystem electronics, thin film resistor, resistor trimming, resistor tolerance, resistor accuracy, resistor, film resistor

ABSTRACT: Several procedures for individually trimming microelectronic film resistors are considered. These include either stepwise or gradual addition or removal of resistive film to an initially fixed resistor. The choice of the method is related to the required accuracy and permissible tolerance. It is concluded that such procedures ensure high accuracy even when the resistivity of

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ACCESSION NR: AP4012357

the film and the dimensional accuracy of the resistor contours are not reproducible with high precision. Orig. art. has: 8 figures.

ASSOCIATION: Kazanskiy aviatsionnyy institut (Kazan' Aviation Institute)

SUBMITTED: 03Dec62 DATE ACQ: 14Feb64 ENCL: 00

SUB CODE: GE, SD NO REF SOV: 000 OTHER: 000

Card 2/2

ACCESSION NR: AP4012358 S/0142/63/006/006/0628/0633

AUTHOR: Yermolayev, Yu. P.

TITLE: Calculation of optimal number of film elements on microcircuit plates

SOURCE: IVUZ. Radiotekhnika, v. 6, no. 6, 1963, 628-633

TOPIC TAGS: microelectronics, microsystem electronics, thin film element, integrated thin film circuit, manufacturing tolerance, microcircuit plate, microcircuit substrate, thin film circuit, film element

ABSTRACT: Although a thin film assembly with a large number of elements on a single plate has lower weight and dimensions and needs fewer manufacturing operations per element, failure of one element to meet specifications makes it necessary to reject an entire plate. A calculation procedure and a chart are given to help with the choice of the optimal number of elements on a plate with allowane for the probability that one of the elements may be faulty.

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ACCESSION NR: AP4012358

Plates with elements having the same and different types of elements (same or different probability of faulty manufacture) are considered. The probability with which similar elements vary from plate to plate is also taken into account. It is recommended that the procedure be applied to several different plate and element combinations.

ASSOCIATION: Kazanskiy aviatsionny*y institut (Kazan' Aviation Institute)

SUBMITTED: 09Jan63 DATE ACQ: 14Feb64 ENCL: 00

SUB CODE: SD, GE NO REF SOV: 000 OTHER: 000

Card 2/2

ACCESSION NR: AP4012359 S/0142/63/006/006/0634/0638

AUTHORS: Yermolayev, Yu. P.; Alimova, R. A.

TITLE: Calculation and analysis of the accuracy of microcircuit film capacitors

SOURCE: IVUZ. Radiotekhnika, v. 6, no. 6, 1963, 634-638

TOPIC TAGS: microelectronics, microsystem electronics, thin film capacitor, capacitor accuracy, capacitor tolerances, capacitor rating, capacitor

ABSTRACT: The errors in microelectronic film capacitor ratings due to imperfect overlap of the upper and lower electrodes are calculated, assuming constant dielectric thickness and area, and assuming that the dielectric extends beyond the limits of the two electrodes. Four variants of rectangular geometry are considered (Enclosure 01). It is shown that variant d is best from this point

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ACCESSION NR: AP4012359

of view, since the error in the centering of the mask for the lower electrode can be neglected. Square capacitors are best, the errors increasing with increasing ratio of the sides in the case of rectangular construction. Orig. art. has: 2 formulas and 7 graphs.

ASSOCIATION: Kazanskiy aviatsionny*y institut (Kazan' Aviation Institute)

SUBMITTED: 18Dec62 DATE ACQ: 14Feb64 ENCL: 01

SUB CODE: GE, SD NO REF SOV: 000 OTHER: 000

Card 2/3

YEREMEYEV, Yu.P.

Calculation of the dissipation power of rectilinear printed resistances. Trudy FAT no.73:95-103 '63.

Small printed resistances in high-frequency circuits. Ibid.: 169-172

(MIRA 17:10)

ACCESSION NR: AP4043569 S/0146/64/007/004/0150/0154

AUTHOR: Khasanov, R. K.; Yermolayev, Yu. P.

TITLE: Stationary temperature field in a micromodule

SOURCE: IVUZ. Priborostroyeniye, v. 7, no. 4, 1964, 150-154

TOPIC TAGS: micromodule, temperature field, micromodule temperature field, temperature distribution, electronic equipment

ABSTRACT: The stationary field of a homogeneous isotropic cube (with a 1.2-cm edge) which simulated a micromodule is considered; also, the effects of the following factors on the field are analyzed: (1) variations of the shape and size of a single central heat source; (2) a high-thermal-conductance layer situated next to the heat source; (3) various deployments of heat sources in the module. These assumptions were made: (a) the source power does not vary with a variation of its configuration and place; (b) the temperature field of the source is uniform;

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ACCESSION NR: AP4043569

(c) the temperature at the body boundaries is the same. An approximate solution was performed on a 3-dimensional electric simulator which was subdivided into small cells; three electrical resistors represented each cell. It was found that inside overheating is largely dependent on the heat-source surface and negligibly dependent on its place. Orig. art. has: 3 figures and 2 formulas.

ASSOCIATION: Kazanskiy aviatsionny*y institut (Kazan' Aviation Institute)

SUBMITTED: 06Sep63 ENCL: 00

SUB CODE: EC NO REF SOV: 005 OTHER: 002

Card 2/2

L 10682-66 EWT(l)/EWA(h) TG

ACC NR: AP6000525 SOURCE CODE: UR/0142/65/008/005/0607/0611

AUTHOR: Yermolayev, Yu. P.; Kholopov, V. V.

ORG: none

TITLE: Evaluation of the complexity of film and hybrid microelectronic modules from the viewpoint of number and type of contact junctions

SOURCE: IVUZ. Radiotekhnika, v. 8, no. 5, 1965, 607-611

TOPIC TAGS: system reliability, microelectronic packaging

ABSTRACT: An analysis is presented of the complexity of microelectronic modules as it is affected by type and number of contacts and method of interconnection. Four types of contacts are considered: 1) contacts between film elements; 2) soldered or welded contacts between discrete components and film conductors; 3) soldered or welded contacts between conducting films and module outputs; and 4) soldered contacts between module outputs and printed-circuit wiring. Three methods of module interconnection are considered: 1) all modules are interconnected through printed-circuit wiring; 2) part of the module interconnections are made through printed-circuit wiring and part directly by jumper wires; and 3) all connections are made by jumper wires. Families of curves are given by which a designer may readily see how the percentage of acceptable (in the statistical sense) modules will be affected by inclusion or exclusion of a specific number of contacts of a particular type. Using the same

Card 1/2 UDC: 621.316.8-181.4

L 10682-66

ACC NR: AP6000525

graph, the designer may select the optimum mode of assembly with reference to module interconnection. Finally, the authors derive expressions for the optimum (in the sense of maximum module exploitation) number of modules for each of the three methods of interconnection. Orig. art. has: 2 figures and 14 formulas. [BD]

SUB CODE: 09, 14/ SUBM DATE: 18Dec64/ ATD PRESS: 4167

HW

Card 2/2

L 47572-66

ACC NR: AP6032163 SOURCE CODE: UR/0410/66/000/004/0050/0054

AUTHOR: Dmitriyev, V. D.; (Kazan'); Yermolayev, Yu. P. (Kazan'); Kholopov, V. V. (Kazan') 22 B

ORG: none

TITLE: The problem of increasing the accuracy of RC distributed parameter networks

SOURCE: Avtometriya, no. 4, 1966, 50-54

TOPIC TAGS: RC circuit, distributed parameter, CIRCUIT DESIGN

ABSTRACT: The problem of manufacturing distributed film RC networks with reproducible transfer characteristics is analyzed. The networks are made by vacuum deposition through masks of alternate rectangular layers of conductive, dielectric, and resistive materials. The problem of reproducibility arises when there is a spread in the mask apertures and their alignment. Fig. 1 illustrates some of these reproduction problems. Fig. 1a shows an uneven layer of resistive material (white) on the capacitance (hatched region). The RC product remains the same because whenever the resistance per unit length increases there is a corresponding decrease in per-unit capacitance; lateral mask misalignment is therefore not harmful. Fig. 1b shows the lower capacitance plate layer (hatched region L units long), a resistive layer (white region), film contacts attached to the resistance (hatched end areas), and the equivalent circuit for this ideal configuration. Fig. 1c shows that when the

Card 1/4 UDC: 621.382.416

L 47572-66

ACC NR: AP6032163

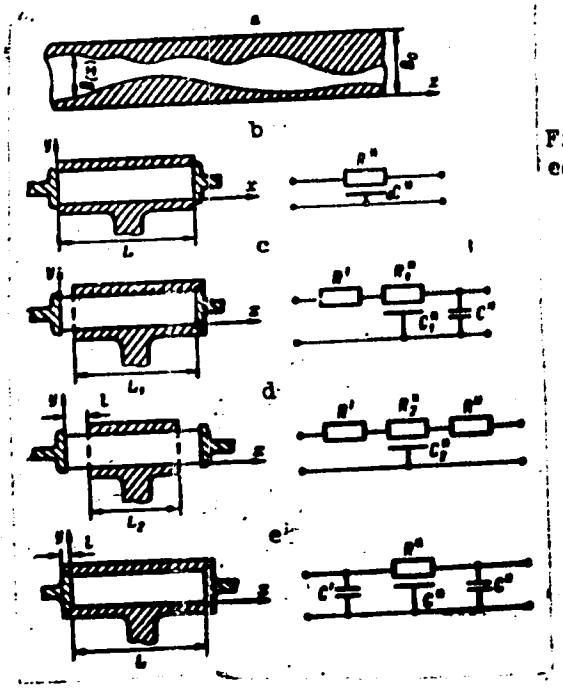

Fig. 1. Distributed RC networks with equivalent circuits.

Card 2/4

resistive layer and contact layers are misaligned, R' and C'' appear, respectively. To combat this problem, either the resistive layer is made to overlap the capacitive layer, (Fig. 1d), in which case the RC circuit acquires two bulk resistors (R' and R'') but the RC product remains as designed, or, preferably, the contact layer is made to overlap the resistive and lower capacitance plate layers, thus producing capacitances C' and C'', (Fig. 1e). Figs. 2 and 3 show the results of tests of RC

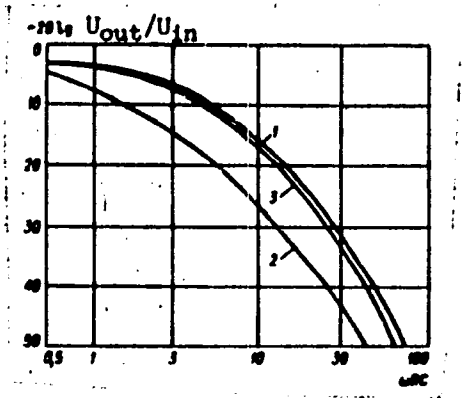

Fig. 2. Transfer characteristics for network of Fig. 1b.

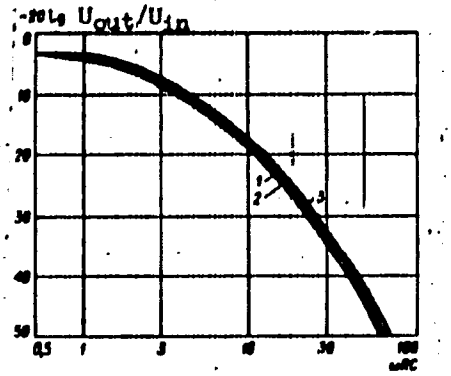

Fig. 3. Transfer characteristics for network of Fig. 1d.

L 47572-66

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distributed networks (L = 10 mm) made according to the methods shown in Figs. 1b and 1c, respectively. Curve 1 in both figures corresponds to exact mask alignment; curves 2 and 3 correspond to maximum mask shift of 1 mm in the left and right directions. Orig. art. has: 2 formulas and 4 figures. [BD]

SUB CODE: 09/ SUBM DATE: 20Jan66/ ORIG REF: 001/ OTH REF: 001/ ATD PRESS: 5093

Card 4/4

L 02988-67 EWT(l)/EWT(m)/T/EWP(t)/ETI IJP(c) JD/GG
ACC NR: AP6033222 SOURCE CODE: UR/0142/66/009/004/0553/0557

AUTHOR: Yermolayev, Yu. P.

ORG: none

TITLE: The intermediate resistance of contacts between conducting and resistive thin films

SOURCE: IVUZ. Radiotekhnika, v. 9, no. 4, 1966, 553-557

TOPIC TAGS: microelectronic thin film, thin film circuit, METAL FILM, ELECTRIC RESISTANCE, ELECTRIC CONDUCTION

ABSTRACT: An attempt was made to establish analytically the dependence of intermediate resistance on 1) the geometry of transition contact areas between conducting and resistive thin films and 2) the physical properties of the thin films themselves. Formulas were derived for determining the geometry and size of the transition contact areas, with the assumptions that 1) an intermediate resistance, produced by the difference in materials and by the formation of oxide films and other impurities, exists between the conducting and resistive films in the contact area; 2) the resistance of the conducting film is relatively small and, as a result, the equipotential lines are along the boundary between the conducting and resistive films; and 3) electric field distortions in the contact area, caused by changes in the shape of the resistive films, are neglected. The effectiveness of the analytical method has been verified in experiments. Orig. art. has: 5 formulas and 3 figures.

SUB CODE: 09/ SUBM DATE: 29Mar65/ ORIG REF: 002/ ATD PRESS: 5099
UDC: 621.382.8

Card 1/1 awm

L 02985-67 EWT(m)/EWP(t)/ETI IJP(c) JD

ACC NR: AP6033217 SOURCE CODE: UR/0142/66/009/004/0497/0502

61
B

AUTHOR: Yermolayev, Yu. P.; Alimova, R. A.; Chepakhin, G. A.

ORG: none

TITLE: The influence of certain manufacturing factors on the accuracy of thin-film resistors and capacitors on a common substrate

19

SOURCE: IVUZ. Radiotekhnika, v. 9, no. 4, 1966, 497-502

TOPIC TAGS: thin film circuit, microelectronic thin film, circuit design, resistor, capacitor

25

ABSTRACT: The manufacture of precision thin-film resistors and capacitors on the same substrate by the vacuum evaporation method is analyzed. It is shown that with increasing distance from the center of the evaporant the specific resistance of films increases and that of capacitors decreases. The authors give a quantitative analysis of these phenomena based on a geometric interpretation, assuming a finite shadow mask thickness, absence of contaminating gas molecules, and perfect positioning of the mask on the substrate. The curves of specific resistance and capacitance variations as functions of the ratio of mask aperture to mask thickness are given. Equations approximating these curves at various distances from the center of the evaporant are presented. Methods are suggested for optimum geometrical distribution of elements in the thin-film circuit design to obtain maximum accuracy for the passive elements. Orig. art. has: 5 formulas and 5 figures.

SUB CODE: 09/ SUBM DATE: 22Feb63/ ORIG REF: 003/ ATD PRESS: 5099

UDC: 621.382.8.416

Card 1/1

CA YERMOLAYEVA, A.A.

New surface-active agents. A. A. Ermolaeva. *Tekstil. Prom.* 1949, No. 4, 25-8.—A no. of proprietary textile chemicals, chiefly sulfates and sulfonates, are compared. Quant. data are presented on their effects on surface tension, wetting power, stability to Ca salts, foam formation, and alk. scouring of fabrics. H. A.

YERMOLAYEVA, A.A.; LOBANOVA, M.I.

Selecting the new types of auxiliary preparations and their use in textile finishing. Nauch.-issl.trudy TSNIKHBI za 1958 g: 144-157. (MIRA 16:1)

(Textile finishing)

YERMOLAYEVA, A.A.; LAGODZINSKAYA, N.M.; LOBANOVA, M.I.

New surface-active substances. Nauch.-iss. trudy TSNIKHBI za 1962 g.:269-281 '64. (MIRA 18:8)

YERMOLAYEVA, A.D.

Work of the section on hygiene, microbiology and epidemiology of the Stalinsk Medical Society during 1957-1958. Gig.i san. 24 no.11:79-80 N '59. (MIRA 13:4)
(STALINSK PUBLIC HEALTH SOCIETIES)

YERMOLAYEVA, A.D.; BAZHIN, M.S.

Experience in conducting an over-all rat control campaign in a large city. Zhur. mikrobiol. epid. i immun. 31 no.7:137-140 Jl '60. (MIRA 13:9)

1. Iz Stalinskogo instituta usovershenstvovaniya vrachey i Gorodskoy sanitarno-epidemiologicheskoy stantsii.
(RATS--EXTERMINATION)

IVANOV, V.S.; YERMOLAYEVA, A.D.; SYROMYATNIKOV, K.A.

Device for the automatic determination of the carbamide content in a solvent. Khim.i tekh.topl.i masel 7 no.9:46-50 S '62. (MIRA 15:8)

1. Leningradskiy filial Spetsial'nogo konstruktorskogo byuro avtomatizatsii neftepererabotki i neftekhimii.
(Urea) (Paraffin wax)

LUKDINA, M.G., kand.tekhn.nauk; Prinimali uchastiye: LOSHLYAK, L.L., mladshiy nauchnyy sotrudnik; YERMOLAYEVA, A.I., mladshiy nauchnyy sotrudnik; SAFRONOVA, Z.A., mladshiy nauchnyy sotrudnik; RAUKHMAN, B.R., inzh.; METLITSKAYA, S.S.; SHISHKONOVA, L.I.; MURAV'YEVA, L.V.

Investigating the processing of clay in making bricks. Trudy NII Stroikeramiki no. 14:3-35 '59. (MIRA 14:1)

1. Obshchesoyuznyy nauchno-issledovatel'skiy institut stroitel'noy keramiki (for Loshlyak, Yermolayeva, Safronova). 2. Nachal'nik laboratorii Voronteovskogo kirpichnogo zavoda (for Shishkanova). 3. Nachal'nik laboratorii Nishne-Kotel'skogo kirpichnogo zavoda (for Shishkanova). 4. Nachal'nik laboratorii Moskovskogo eksperimental'nogo zavoda (for Murav'yeva).
(Clay)

[illegible], M.G., kand. tekhn. nauk; YERMOLAYEVA, A.I., inzh.

Color ceramic stone for finishing façades. Trudy NIIStroikeramiki no.24:128-132 '64. (MIRA 18:7)

YERMOLAYEVA, A.L., aspirant

Compared effectiveness of raising and keeping double-purpose chickens in cages. Ptitsevodstvo 9 no.8:33-36 Ag '59.
(MIRA 12:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut ptitsevodstva.
(Poultry)

PATRIK, I.A., kand. sel'skokhoz. nauk; VINOGRADOVA, A.P., kand. sel'skokhoz. nauk; YERMOLAYEVA, A.L., mladshiy nauchnyy sotrudnik

Raising meat chicken in cages. Trudy TSNIIPPa 9:46-53 '62. (MIRA 16:6)

(Poultry industry)

YERMOLAYEVA, Antonina Nikitichna; ANTONENKO, Vera Vasil'yevna; KRYUCHKOVSKIY, Semen Arkad'yevich; VOLGAR', L.G., kand. biol. nauk, nauchn. red.; FEDYUSHINA, L.M., red.

[Biology for agriculture, Biochemistry, Biology and space; lists of recommended books] Biologiia - sel'skomu khoziaistvu, Khimiia zhizni, Biologiia i kosmos; rekomendatel'nye spiski literatury. Nauchn. red. L.G.Volgar'. Leningrad, 1963. 23 p. (Na temy dnia, no.7) (MIRA 17:2)

1. Leningrad. Publichnaya biblioteka.

VERMOLAYEVA, Antonina Nikitichna; KORNILOV, M.F., doktor sel'-khoz. nauk, nauchn. red.; TOLOCHINSKAYA, B.M., red.; KRYUCHKOVSKIY, S.A., red.

[Chemistry in agriculture; index of recommended literature for compulsory education in agrochemistry] Khimiia v sel'-skom khoziaistve; rekomendatel'nyi ukazatel' literatury v pomoshch' agrokhimicheskomu vseobuchu. Leningrad, 1964. 51 p. (MIRA 17:11)
1. Leningrad. Publichnaya biblioteka.

YERMOLAYEVA, E.N. (Kiyev)

Curvature of curves on a smooth surface in points where no second derivatives exist. Ukr. mat. zhur. 16 no.1:89-93 '64. (MIRA 17:5)

ADAS'KA, Galina [Adas'ka, Halina], brigadir; YERMOLAYEVA, F.P. [IErmalaieva, F.P.], agronom; DUDAREVA, Galina [Dudarava, Halina], dayarka

We shall carry out the decisions of the plenary session. Rab.i sial. 38 no.5:6-7 My '62. (MIRA 16:1)

1. Polevodcheskaya brigada kolkhoza im. Kirova, Baranovichskogo rayona (for Adas'ka). 2. Kolkhoz "Mayak kommunizma" Mogilevskogo rayona (for Yermolayeva). 3. Kolkhoz "Leninskaya iskra", Orshanskogo rayona (for Dudareva).

(Women as farmers)

SOV/133-58-8-5/30

AUTHORS: Sidyakov, P.V., Zarzhevskiy, N.Ya., and Yermolayeva, G.F.

TITLE: Ventilation of the Hot Blast Stove Houses of Blast Furnaces (Ventilyatsiya zdaniy vozdukhonagrevateley domennykh pechey)

PERIODICAL: Stal', 1958, Nr 8, pp 691 - 693 (USSR)

ABSTRACT: Various systems of ventilation of buildings partly enclosing hot blast stoves were investigated. On the basis of the results obtained, a ventilation system based on natural movement of air is recommended. There are 2 figures and 3 tables.

ASSOCIATION: Nauchno-issledovatel'skiy institut gigiyeny truda i profzabolevaniy (Scientific-research Institute of Labor Hygiene and Occupational Diseases)

Card 1/1 1. Structures--Ventilation 2. Furnaces--Equipment

KORCHAGIN, V.; YERMOLAYEVA, I.

Calendar for the work of a fruitgrower. Zashch. rast. ot vred. i bol. 10 no.5:37-38 '65. (MIRA 18:6)

1. Vystavka dostizheniy narodnogo khozyaystva SSSR.

KORCHAGIN, V.N.; YERMOLAYEVA, I.A.

Hexachloran in the control of the strawberry mite Steneotarsonemus pallidus. Zashch. rast. ot vred. i bol. 8 no.10:22-23 O '63. (MIRA 17:6)

1. Stantsiya zashchity rasteniy na Vystavke dostizheniy narodnogo khozyaystva SSSR.

KUZNETSOV, A.V.; PADUCHEVA, Ye.V.; YERMOLAYEVA, I.M.

Informational language for geometry and the algorism for translation from the Russian to the informational language. Soob. Otd.mekh.i avtom.inform.rab. no.2:40-73 '61. (MIRA 15:2)
(Programming languages (Electronic computers)--Geometry)

PIMENOV, V.I.; ARKHIPOV, P.I.; YEMMOLAYEVA, L.G.

Physicomechanical action exerted on felt footwear uppers in the process of rubber sole fastening by vulcanization. Mauch.-issl. trudy TSNIKP no.32:95-103 '60. (MIRA 15:12)
(Boots and shoes, Felt) (Vulcanization)

ACCESSION NR: AR4023356 S/0284/64/000/002/0013/0013

SOURCE: RZh. Voprosy* tekhnicheskogo progressa i organizatsii proizvodstva v mashinostroyenii, Abs. 2.35.69

AUTHOR: Gerasimova, N. V.; Yermolayeva, L. I.; Matyayeva, L. K.; Filippova, T. N.; Pervin, Yu. A.

TITLE: Programming methods for the automation of technological planning

CITED SOURCE: Tr. proyektn., tekhnol., i n.-i. in-ta. Volgo-Vyatsk. sovnarkhoz, vy*p. 2, 1963, 94-111

TOPIC TAGS: automatic programming, technological process, computer-controlled machine tools

TRANSLATION: An algorithm for the automatic planning of technological processes may be divided into two parts. The first incorporates the processing of the geometric information (blueprint data) to determine such features of a part as its shape and design characteristics essential for the technological process. The second part, the actual planning, reflects the production conditions. A program

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ACCESSION NR: AR4023356

for the automatic planning of turning operations during piece-produced and small-series production has been investigated. Data about the surfaces of the part are fed into the memory of an URAL-2 electronic computer. A relatively small proportion of these data, needed in most subroutines, is stored in the operational memory. Data about the special features of the part are coded on magnetic tape (MT); they are retrieved into the operational memory only once during the compilation of the technological charts for the given part. The program for scanning the technological characteristics occupies 306 locations. The program for automatic planning includes the compilation of the following subroutines: the subroutine for path control in the processing of the given part; the auxiliary subroutine for branching to each operation; and subroutines specifying the tool, its geometry and cutting conditions. All these subroutines are recorded and stored on the MT. The subroutines for branching are retrieved from the MT in accordance with the operation code. Each subroutine determining the path control of the tool on the part requires 704 positions. The combined total volume of the program is about 10,000 positions. Using the first part of the algorithm one obtains the path control chart for the given part, and supplementary information for position changes and their parameters. On the basis of retrievals of the subroutines that determine the position changes in accordance with the operation

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ACCESSION NR: AR4023356

code, the operational chart is compiled and recorded on the MT. For parts of average complexity the overall time for compiling the program, including access to the MT, is about 3 minutes. A general block diagram of the program and block diagrams of the individual subroutines are given, together with the structure of the language for the characteristics of the part, and the storage layout. A. Proskuryakov.

DATE ACQ: 06Mar64 SUB CODE: IE, CP ENCL: 00

Card 3/3

KOVALENKO, V.M.; NIKIFOROV, I.N.; Prinimali uchastiye: VORONOVA, M.Ye.; KORNEYEVA, N.M.; UZBEKOVA, A.Kh.; YERMOLAYEVA, L.K.

New gasoline-, oil-, fat-, and water-resistant paint coatings. Lakokras. mat. i ikh prim. no.5:33-35 '63. (MIRA 16:11)

YERMOLAYEVA, L.M.

Effect of the length of daylight on the development of algae (Diei longitude et algarum vegetatio). Bot.mat.Otd.spor.rast. 9:39-46 My '53. (MLRA 7:2) (Algae)

YERMOLAYEVA, L.M.; SKRYABIN, K.I., akademik.

Development of anzospores in the algae Cyclotella Meneghiniana KTZ. Dokl. AN SSSR 91 no.1:165:168 Jl '53. (MLRA 6:6)

(Algae)

1. Akademiya nauk SSSR (for Skryabin)

YERMOLAYEVA, L.M.

New species of the genus Gomphonema Ag. Bot.mat.Otd.spor.rast. 11:149-50 Ja '56. (MLRA 9:11)
(Omsk Province--Diatoms)

YERMOLAYEVA, L.M.

USSR/General Biology - General Ecology and Hydrobiology. B-5

Abs Jour : Ref Zhur - Biologiya, No 7, 10 April 1957, 25975

Author : Yermolayeva, L.M.
Inst : Omsk Medical Institute
Title : A Hydrobiological and Hygienic Study of Two Kolkhoz Reservoirs in the Wooded Steppe Belt of the Omsk Oblast.

Orig Pub : Tr. Omskogo med. in-ta, 1956, No 19, 11-22

Abst : Descriptions are given of two artifical reservoirs, of their hydrological and physico-chemical characteristics, as well of the phyto- and zooplankton present and their seasonal variation, and of the samitary conditions obtaining in both reservoirs: one is suited for various farm and household uses and for the raising of carp, while the other cannot be used at the present time because of considerable contamination.

Bibliography of 17 titles.

Card 1/1

YERMOLAYEVA, L.M.

Significance of the length of the photoperiod for the development of Pediastrum. Bot.zhur. 45 no.7:1069-1073 Jl '60. (MIRA 13:7)

1. Omskiy meditsinskiy institut.
(Algae) (Photoperiodism)

YERMOLAYEVA, L. M.

Algae of dug ponds in Omsk Province and their efficient utilization. Nauch. dokl. vys. shkoly; biol. nauki no.3:105-108 '62. (MIRA 15:7)

1. Rekomendovana kafedroy biologii Omskogo meditsinskogo instituta.

(OMSK PROVINCE—ALGAE) (OMSK PROVINCE—FARM PONDS)

YERMOLAYEVA, L.M.

Food of the amphipod crustacean Gammarus lacustris Sars. Zool.zhur. 41 no.8:1257-1259 Ag '62. (MIRA 15:9)

1. The Department of Biology, The Meical Institute of Omsk. (Gammaridae)

YERMOLAYEVA, L.M.; FEDOROV, V.G.

Effect of gibberellin on the development of algae. Nauch. dokl. vys. chkoly; biol. nauki no.1:133-135 '64. (MIRA 17:4)

1. Rekomendovana kafedroy obshchey biologii Omskogo meditsinskogo instituta.

YERMOLAYEVA, L.M.

Development of algae in the new dammed-gully and dug ponds in Omsk Province. Bot.zhur. 49 no.11:1638-1644 N '64.

(MIRA 18:1)

1. Omskiy gosudarstvennyy meditsinskiy institut imeni M.I.Kalinina.

YERMOLAYEVA, L.M.; FEDOROV, V.D.

Brief survey of research on the algal population of the ponds of Western Siberia. Trudy TSSBS no.8:19-20 '64. (MIRA 18:7)

GERASIMOVA, N.V.; YERMOLAYEVA, L.N.; MATYAYEVA, L.K.; FILIPPOVA, T.N.; PERVIN, Yu.A.

Programming for the automation of technological designing. Trudy Proek. tekh. i nauch.-issl. inst. no.2:94-111 '63 (MIRA 17:7)

Yermolayeva, L.P.

20-2-37/60

AUTHORS: Yevreinova, T. N., Yermolayeva, L. P., Gerasimova, A. M.

TITLE: Purine and Pyrimidine Bases of the Thermophile Variety of Bacillus mycoides (Purinovyye i pirimidinovyye osnovaniya termofil'nogo varianta Bacillus mycoides)

PERIODICAL: Doklady AN SSSR, 1958, Vol. 118, Nr 2, pp. 334 - 337 (USSR)

ABSTRACT: It is to be assumed that thermophile microorganisms must have their chemical peculiarities. The chemism of life at high temperatures is, however, very little investigated. Many purine- and pyrimidine-bases are contained in the nucleic acids, nucleotids and nucleosides of the microbes. The former contain 3 groups and serve as sources of co-enzymes of a number of biological reactions and energy-rich phosphorus compounds (reference 4). It is of interest to determine which influence is exerted by the high temperature upon the total content of purine- and pyrimidine-bases. The thermophile proteolytic variety of Bacillus mycoides chosen as test object was isolated from the dregs of sewage which are fermented in thermophile vessels of methane production (reference 1). Table 1 gives the morphological characteristic of 2 cultures: a) at 58°C and b) at 44°C. The purine- and pyrimidine-bases were determined by distilling off of alcohol from alcohol-centrifugates. The chromato-

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Purine and Pyrimidine Bases of the Thermophile Variety of Bacillus mycoides

graphic method on paper was used for this (references 8, 9). The 4-contents of the bases in the bacterial mass were determined (table 2). From this is to be seen that with an increase in temperature from 44 to 58°C the total amount of these bases decreases by about 38 %. The content of every individual basis in the culture cultivated at 58°C is smaller than at 44°C. The temperature is a factor which accelerates chemical enzymatic reactions, consequently also the biological processes. The decrease in these bases may here possibly be explained by the fact that the increased temperature partially replaces the enzymatic activity and the energy which were connected with the presence of the bases in the microorganisms. The following bases were determined: guanine, adenine, cytosin, uracyl, and thymine. There are 3 figures, 2 tables, and 9 references, 4 of which are Slavic.

ASSOCIATION: State University imeni M. V. Lomonosov, Moscow (Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova)
PRESENTED: September 6, 1957, by A. I. Oparin, Academician
SUBMITTED: September 6, 1957
AVAILABLE: Library of Congress

ZBARSKIY, I.B.; RAMENSKAYA, G.P.; MUL'MAN, L.S.; YERMOLAYEV, L.P.

Concentration and nucleotide composition of nucleic acids in the ontogeny of the silkworm Bombyx mori. Zhur.ob.biol. 20 nl.6:428-438 N-D '59. (MIRA 13:4)

1. Institut morfologii zhivotnykh im. A.N. Severtsova AN SSSR.
(SILKWORMS) (NUCLEIC ACIDS)

ZBARSKIY, I.B.; YERMOLAYEVA, L.P.

Characteristics of nuclear nucleoproteins of certain tissues. Biokhimiia 25 no.1:112-117 Ja-F '60. (MIRA 13:6)

1. Institute of Animal Morphology, Academy of Sciences of the U.S.S.R., Moscow.
(NUCLEOPROTEINS chem.)

ZBARSKIY, I.B.; YERMOLAYEVA, L.P.

Composition of spermatozoon nuclei in the Baltic salmon. Dokl. AN SSSR 140 no.1:240-243 S-O '61. (MIRA 14:9)

1. Institut morfologii zhivotnykh im. A.N.Severtsova AN SSSR. Predstavleno akademikom A.I.Oparinym.
(SPERMATOZOA) (CELL NUCLEI) (PROTEINS IN THE BODY)

ZBARSKIY, I.B.; YERMOLAYEVA, L.P.; DMITRIYEVA, N.P.

Residual proteins in nuclei of normal and tumor cells. Vop. med. khim. 8 no.2:218-221 Mr-Ap '62. (MIRA 15:4)

1. Institut morfologii zhivotnykh imeni A.N.Severtsova AN SSSR, Moskva.
(CANCER) (PROTEIN METABOLISM) (CELL NUCLEI)

ZBARSKIY, I.B.; DMITRIYEVA, N.F.; YERMOLAYEVA, L.P.

Characteristics of the nuclear structure of tumor cells.
Tsitologiia 5 no.5:499-506 S-O '63. (MIRA 17:4)

1. Laboratoriya biokhimii kletochnykh struktur i Laboritoriya tsitologii Instituta morfologii zhivotnykh AN SSSR, Moskva.

ZBARSKIY, I. B.; KHRUSHCHOV, N. G.; YERMOLAYEVA, L. P.

"On the composition and biological role of the nucleolus-associated heterochromatin."

report submitted for 2nd Intl Cong, Histochemistry & Cytochemistry, Frankfurt, 16-21 Aug 64.

Inst of Animal Morphology, AS USSR, Vavilov Street 12/2, Moscow B-133.

YERMOLAYEVA, L. P.; ZBARSKIY, I. B.; KHRUSHCHEV, N. G.

"On the Existence and Intranuclear Localization of a DNA fraction differing by its Base Composition from Total Cellular DNA."

report to be presented at the 6th Intl Biochemistry Cong, New York City, 26 Jul-1 Aug 1964.

ZBARSKIY, I.B.; YERMOLAYEVA, L.P.; KHRUSHCHOV, N.G.

Characteristics of the nucleotide composition of DNA of the perinucleolic chromatin. Dokl. AN SSSR 157 no.1:175-177 Jl '64
(MIRA 17:8)

1. Predstavleno akademikom A.I. Oparinym.

GEORGIYEV, G.P.; YERMOLAYEVA, L.P.; ZBARSKIY, I.B.

Quantitative interrelationship between protein and nucleoprotein fractions in cell nuclei of various tissues. Biokhimiia 25 no.2: 318-322 Mr-Ap '60. (MIRA 14:5)

1. Institut morfologii zhivotnykh im. A.N.Severtsova Akademii nauk SSSR, Moskva.
(PROTEINS IN THE BODY) (CELL NUCLEI)

ZBARSKIY, I.B.; YERMOLAYEVA, L.P.

Characteristics of nuclear nucleoproteins of some experimental tumors and of chick embryos. Biul. eksp. biol. i med. 50 no.10:64-67 O '60. (MIRA 14:5)

1. Iz gruppy biokhimii kletochnykh struktur (zav. - prof. I.B. Zbarskiy) Instituta morfologii zhivotnykh imeni A.N.Severtseva (dir. - chlen-korrespondent AN SSSR prof. G.K.Khrushchov) AN SSSR Moskva. Predstavlena deystvitel'nym chlenom AMN SSSR S.Ye. Severinym.

(NUCLEOPROTEINS)

YERMOLAYEVA, M. I.

2

S/193/60/000/012/006/018
A004/A001

AUTHORS: Shlyapin, V. B., Vinogradov, Yu. G., Leont'yev, D. V., Rovkakh, S. Ye., Kolesnichenko, A. N., Yermolayeva, M. I.

TITLE: Vibration-Arc Build-Up of Parts With the Aid of the Automatic АНКЭФ-1 (ANKEF-1) Head

PERIODICAL: Byulleten' tekhniko-ekonomicheskoy informatsii, 1960, No. 12, pp. 20-21

TEXT: The Tsentral'nyy nauchno-issledovatel'skiy institut putey soobshcheni-ya (Central Scientific Research Institute of Transport) (TsNII MPS) has developed a new method of submerged vibration arc building-up of shaft journals of the rolling stock. A thin metal layer of 0.3 - 3 mm is built up without cracks, pores and slag impurities. The building-up equipment, the special automatic ANKEF-1 head, was manufactured in cooperation with the design and planning office of the Glavstroymekha-nizatsiya Ministerstva transportnogo stroitel'stva (Glavstroymekhanizatsiya of the Ministery of Transport Engineering). The part being built up is clamped in the centers of a lathe and rotates with a speed of 1-5 rpm while the metal is welded on with the ANKEF-1 head shown in the illustration. The head is actuated by the АОЛ-11-2 (AOL-11-2) 180 w electromotor 1 which also feeds the

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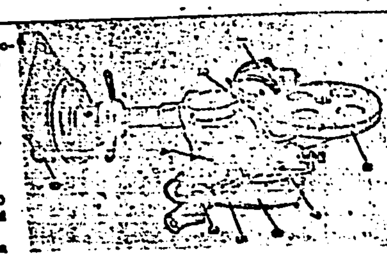

electrode wire to the part and produces the vibrations with the aid of worm reducer 2. Nozzle 3 carries out oscillations parallel to ellipsoid axis. The vibrator consists of an axle and two eccentrically located bushings 4. The axis of the outer bushing is displaced relative to the inner one by 1.5 mm, so that the total eccentricity can be varied from 0 to 3 mm. The nozzle is connected to rocker 5. At the end of the axis of the eccentric mechanism a driven skew bevel wheel is mounted which is geared to the toothed wheel of the worm shaft of the reducer. The set

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of toothed wheels makes it possible to vary the number of nozzle oscillations in the range of 20 - 57 cps. Electrode wire feed mechanism 6 is mounted on a plate fastened to the reducer housing. The driving roll for the wire feed is made of two disks and a set of rubber rings tightened by nut 7. The electrode wire is fed to the part being built up from magazine 8. The feed speed can be varied between 57 and 236 m/hour. The ANKEF-1 head has a special prop 9 by which it is fastened to the cross slide of lathe. By the screw, connecting the head with the prop, the former can be lifted by 200 mm from its lower position. A cylindrical hinge over the screw makes it possible to tilt the head around its horizontal axis through 150°, while it can be swiveled around its vertical axis through 360°. The overall dimensions of the head (height x length x width) are 600 x 560 x 200 mm, it weighs 30 kg. For building-up operations with the ANKEF-1 heads the standard flux grades АН-348 (AN-348) or ОСЦ-45 (OSTs-45) are used. The repair costs of parts reconditioned by building-up amount to 10 - 30% of the manufacturing costs. There is 1 figure.

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SHLYAPIN, V.B.; VINOGRADOV, Yu.G.; LEONT'YEV, D.V.; ROVKAKH, S.Ye.; KOLESNICHENKO, A.N.; YEMOLAYEVA, M.I.

Using the AKSB-1 automatic head in building up parts by the weaving arc method. Biul.tekhn.-ekon.inform. no.12:20-21 '60. (MIRA 13:12)

(Electric welding)

YERMOLAYEVA, N.F., inzhener.

Inventions and innovations in ferrous metallurgy. Stal' 7 no.1: 74-78 '47. (MLRA 9:1)

1.Ministerstvo chernoy metallurgii.
(Metallurgy)

VIKHAREV, Boris Semenovich. Prinimal uchastiye IVANOV, A.D.; YEMOLAYEVA, N.G., red.; VORONTSOVA, Z.Z., tekhn. red.

Izhevsk. Izhevsk, Udmurtskoe knizhnoe izd-vo 1963. 124 p. (MIRA 17:3)

1. Predsedatel' Izhevskogo gorodskogo ispolnitel'nogo komiteta (for Ivanov).

RYBIN, S.F., otv. red.; STOROZHEV, N.A., red.; KIRISOV, A.G., red.; KYCHANOVA, N.I., red.; POPOV, Yu.K., red.; KOVRIGO, V.P., red.; YERMOLAYEVA, K.G., red.

[The Udmurt land; collection of articles, stories, and verses about nature in the Udmurt A.S.S.R.] Krai Udmurtskii; sbornik statei, rasskazov, stikhov o prirode Udmurtii, Izhevsk, Udmurtskoe knizhnoe izd-vo, 1963. 75 p. (MIRA 18:2)

1. Vserossiyskoye obshchestvo sodeystviya okhrane prirody. Udmurtskoye otdeleniye.

KIRILLOV, N.I.; YERMOLAYEVA, N.I.; KRUPENIN, L.K.; KIRILLOVA, N.Ye.

Investigating the hardening of positive color film during its processing. Zhur.nauch.i prikl. fot. i kin. 6 no.2:81-86 Mr-Ap '61. (MIRA 14:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy kinofotoinstitut.
(Color photography—Films)

S/044/61/000/008/001/039
C111/C333

AUTHORS: Yermolayeva, N. M. Shikhanovich, Yu. A.

TITLE: The problem of establishing a mechanical language for the geometry

PERIODICAL: Referativnyy zhurnal, Matematika, no. 8, 1961, 11, abstract 8A79.("Soobshch. Labor. elektromodelir. In-t nauchn. inform. AN SSSR," 1960, vyp 1, 211-215)

TEXT: Short description of the lecture given by the authors at the conference mentioned in Ref. 8A80. The fundamental demands usually postulated for the projected mechanical information languages are explained by the example of the mechanical language for the geometry elaborated by the authors.

[Abstracter's note: Complete translation.]

Card 1/1

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ACCESSION NR: AR3005392 S/0044/63/000/006/V067/V067

SOURCE: RZh. Matematika, Abs. 6V376

AUTHOR: Yermolayeva, N. M.

TITLE: Computer control of device circuits

CITED SOURCE: Sb. Vychisl. i inform. tekhnika, M, 1962, 123-124

TOPIC TAGS: computer theory, device circuit control, digital computer, functional element

TRANSLATION: The circuit is broken down into functional elements (f.e.) operating discretely and having no more than two distinct inputs and one output. Subroutines are devised which describe the operation of each f.e. The basic routine is constructed in the form of three tables in accordance with the links among the f.e. The basic routine indicates the f.e. whose state in each cycle must be stored in the memory cells and then printed for control purposes. The routine was checked on the LEM-I-24 universal digital computer. M. Grinev.

DATE ACQ: 24Jul63 SUB CODE: CP ENCL: 00

Card 1/1

UDRAS, G.Ya.; YERMOLAYEVA, N.N.; REMIZOVA, A.M.

Methodology for setting the expenditure norms of material resources in the production of technical rubber products. Kauch. i rez. 24 no.5: 40-43 My '65. (MIRA 18:9)

1. Nauchno-issledovatel'skiy institut rezinovoy promyshlennosti.

UDRAS, G.Ya.; YERMOLAYEVA, N.N.; REMIZOVA, A.M.

Determining the coefficient of area changes in textile materials in rubberizing and coating with rubber compounds on calenders. Kauch. i rez. 24 no.9:46-48 '65. (MIRA 18:10)

1. Nauchno-issledovatel'skiy institut rezinovoy promyshlennosti.

YERMOLAYEVA, N. P.

PHASE I BOOK EXPLOITATION SOV/4199

Leningrad. Politekhnicheskiy institut

Sovremennyye dostizheniya liteynogo proizvodstva; trudy mezhvuzovskoy nauchno-tekhnicheskoy konferentsii (Recent Achievements in Founding: Transactions of the Scientific and Technical Conference of Schools of Higher Education) Moscow, Mashgiz, 1960. 336 p. Errata slip inserted. 4,000 copies printed.

Resp. Ed.: Yu. A. Nekhendzi, Doctor of Technical Sciences, Professor; Eds.: N. G. Girshovich, Doctor of Technical Sciences, Professor, and K. P. Lebedev, Docent; Managing Ed. for Literature on Heavy Machine Building (Leningrad Department, Mashgiz): Ye. P. Naumov, Engineer; Tech. Eds.: Ye. A. Dlugokanskaya, and Z. V. Shchetinina.

PURPOSE: This book is intended for the technical personnel of foundries. It may be used by students of the field.

COVERAGE: This collection of articles discusses problems in founding processes. Individual articles treat the melting of metals and their alloys, mechanization and automation of casting processes, aspects of the manufacture of steel, cast iron, and nonferrous metal castings. No personalities are mentioned. References accompany individual articles.

Recent Achievements in Founding (Cont.) SOV/4199

Card 7/9

YERMOLENKO, N.F.; LEVINA, S.A.; MALASHEVICH, L.N.

Cation exchange of bivalent metals on a synthetic 13X-type zeolite. Dokl. AN BSSR 7 no.11:756-759 N '63. (MIRA 17:9)

1. Institut obshchey i neorganicheskoy khimii AN BSSR.

VELIKANOV, K.M.; YERMOLAYEVA, N.T.

Method of calculating the economic efficiency of the organization of an alternating continuous line for making turbine-blade forgings. Trudy LPI no.244:74-84 '65.

Calculating the economic efficiency of the technology of the heat treatment of metal-cutting tools. Ibid.:85-93

(MIRA 18:5)

TOROPOVA, G.P., YERMOLAYEVA, E.V.

Physicochemical changes in desoxyribonucleic acid in tissues of irradiated animals [with summary in English]. Med.rad. 3 no.5: 24-29 S-O '58 (MIRA 11:12)

(LIVER, eff. of radiations,
x-rays on desoxyribonucleic acid metab. (Rus))
(INTESTINES, SMALL, eff. of radiations,
same (Rus))
(ROENTGEN RAYS, eff.
on liver & small intestine desoxyribonucleic acid metab. (Rus))
(DESOXYRIBONUCLEIC ACIDS, metab.
liver & small intestine, eff. of x-rays (Rus))

YERMOLAYEVA, N.V.

Nucleic acid concentration in cell components of the mucosa of the small intestine following gamma irradiation. Biokhimiia 25 no.4: 875-878 Jl-Ag '60. (MIRA 13:11)
(NUCLEIC ACIDS) (CELLS)
(GAMMA RAYS—PHYSIOLOGICAL EFFECT)

YERMOLAYEVA, N. V. (USSR)

"The Influence of γ-Irradiation on the Enzymatic Degradation of Desoxyribonucleoproteins."

Report presented at the 5th International Biochemistry Congress, Moscow, 10-16 August 1961

YERMOLAYEVA, N.V.

Enzymatic decomposition of desoxyribonucleoproteins of the appendix following whole-body gamma irradiation. Radiobiologiia 1 no.5:670-675 '61. (MIRA 14:11)

(NUCLEOPROTEINS) (GAMMA RAYS--PHYSIOLOGICAL EFFECT)