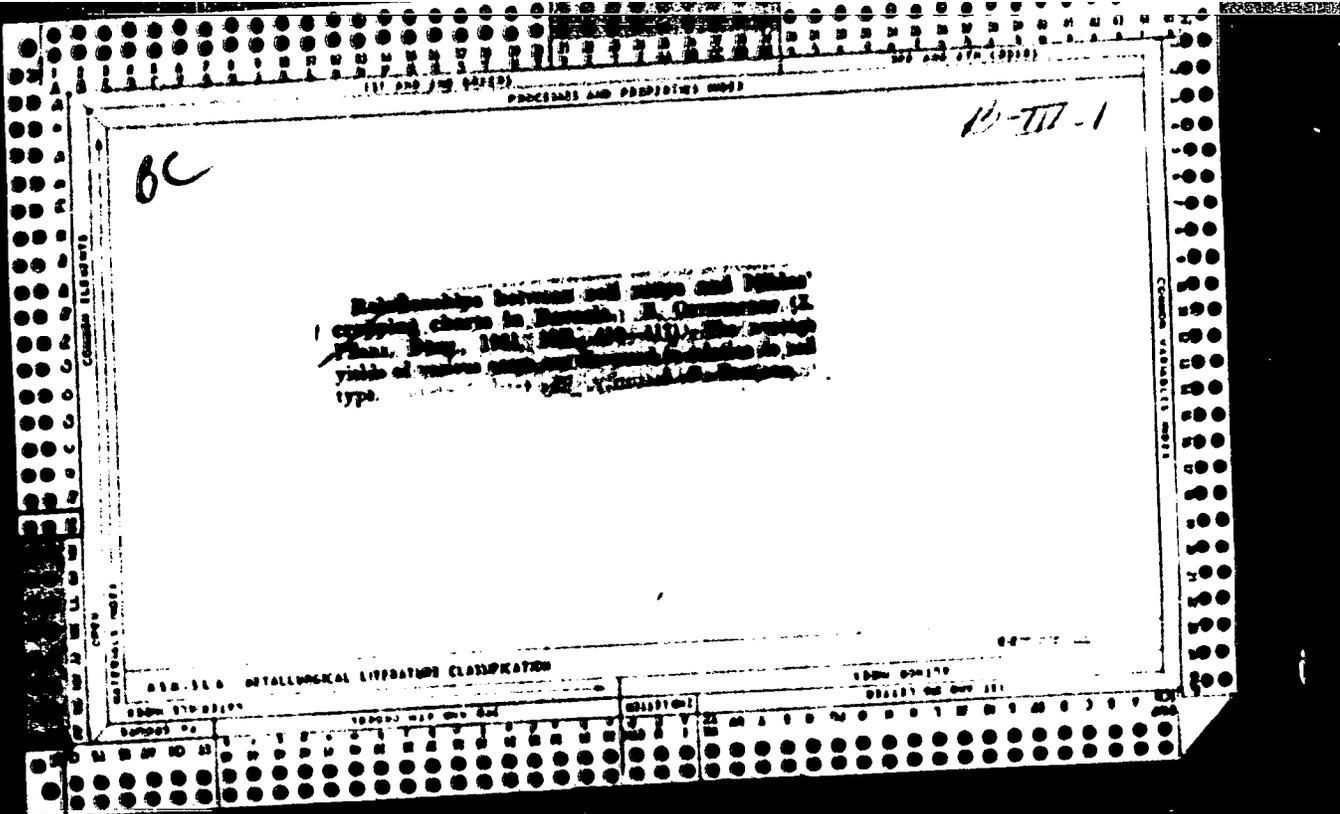


OSTERN, I.

"The mechanism of the glycogenolysis (transmission)." (p. 16) by Farnas, J. K. and Ostern, I.

SO: Advances in Contemporary Biology (Uspekhi Sovremennoi Biologii) Vol. VI, No. 1 1980



ca

Experiences with trass lime-cement concrete as mass concrete K. (continued) *Monatsh. 27, 95-105 (1931)*

This concrete is composed of 55 parts by wt. of trass. In 100 parts of cement, 35 of portland cement, is very little permeable to water, has an elasticity modulus of 134,000 kg/cm², great safety against earth movements. Sp. gr. is 2.00. Compressive strength after 28 (90) days 23 (325) kg/cm². The tensile strength 56 (80) kg/cm². The bonding strength of the concrete to reinforcing steel was 14 kg/cm² after 28 and 21 after 100 days. Use of trass-lime cement prevents occurrence of shrinking cracks in the walls, and also temperature cracks as the temp. rise in setting is moderate (about 12° during the first 11 days). Economical advantages and examples of use in canals and locks are discussed. M. Hattenberg

107
4

Continuous casting mould for the manufacture of ingots of light and heavy metals. P. Ostendorf (D.F. 884,843, 8.8.40) Austria 3.8.40 and 10.1.41. —The mould is composed of an inner jacket forming the actual casting mould and an outer jacket forming the cooling space. The assembly is provided with sealing joints the surfaces of which lie in the direction of the resultant of the transverse expansions of the inner casting mould in two directions at right-angles to one another, thus ensuring that the different expansions between the inner mould and outer jacket give rise only to surface displacements in the sealing joints and that no pressure strains occur. J. H. JACOBS.

A.P.S.

W. L. L. L.

Electrical research in the U.S.S.R. (GERALD OSTEN
Jour. Applied Phys., 18 (3) 131-34 (1945) ~~Soviet indus-~~
try is backed by a great amount of scientific research.
Important contributions to electrical research have been
made by Soviet orientists. Because the U.S.S.R. is to
become a great foreign market for electrical goods, Ameri-
cans should be familiar with the work and the industrial
setup. O reviews contributions in (1) semiconductors and
insulators, including new developments in aluminum oxide
glass, impregnation of glass cloth with rubber oils, and di-
electric properties of glasses, (2) vacuum oscillators,
(3) electron tubes and radio, and (4) magnetism. A P

CA

7

Simple qualitative test for alkoxy groups - K. Kratzl and K. Osterberg (Univ. Vienna, *Monatsh* 81, 99, 5 (1950)). - MeO- and EtO-groups are detected and identified in 0.2 to 0.3 g. samples of the following compds. Br₂CH₂CH₂OH, PbCl(OEt)₂, AcNHCH₂CH₂OH, *p*-C₆H₄(OCH₃)₂, and lignin-HCl, by reaction with HI and transformation of the MeI or EtI formed with CS₂(NH₄)₂ and picric acid into crystalline picrates (60-70% yield). The Me deriv. m 224°, the Et deriv. m 188°. Me₂CHO- and C₂H₅O-groups can also be detected by this method, yielding thionium picrates m 190° and 177°, resp. P. B.

1961

Reference: [unclear]

31

- 1. "Early Diagnosis of Multiple Sclerosis. III. Motor and Other Symptoms (EMERSON) of the Psychoneurological Institute (Psychoneurological Institute) at Prague (Director: Prof. Z. FURDICH, MD); pp 172-178 (English summary).
- 2. "Action of Antibiotics in Multiple Sclerosis." B. BRADICK, C. LADENBERG, D. MOULI, and A. H. RICHIE of the First Clinic for Internal Diseases (First Clinic of the First Clinic for Internal Diseases) at Prague (Director: Prof. Dr. E. CHRIST) and of the Research Office (First Neurological Institute) at Prague (Director: Prof. Dr. E. CHRIST); pp 179-181. (English summary).
- 3. "Prognosis of the First Clinic of Multiple Sclerosis and Perinatal Pathology (First Clinic of Multiple Sclerosis and Perinatal Pathology) at Prague (Director: Prof. Dr. E. CHRIST); pp 182-188. (English summary).
- 4. "Most Frequent Errors in Clinical Diagnosis Resulting from Wrong Interpretation of Electromyography (EMG) and Evoked Potentials (EP) of the Medical Association of the Czech Republic (Director: Prof. Dr. E. CHRIST); pp 189-190. (English summary).
- 5. "Experiments of Therapeutic Action on the Spinal Cord of Patients with Multiple Sclerosis (EMERSON) of the First Clinic of Multiple Sclerosis and Perinatal Pathology (First Clinic of Multiple Sclerosis and Perinatal Pathology) at Prague (Director: Prof. Dr. E. CHRIST); pp 190-193. (English summary).
- 6. "Therapeutic Action of Preparation P 139 (Prepar. II. Association to Healthy Human, Active Substances) in the Treatment of Multiple Sclerosis (EMERSON) of the First Clinic of Multiple Sclerosis and Perinatal Pathology (First Clinic of Multiple Sclerosis and Perinatal Pathology) at Prague (Director: Prof. Dr. E. CHRIST); pp 193-194. (English summary).

HUCZEK-GLEBOCKI, Jerzy; OSTERCZY, Zbigniew

Steroid diabetes. (Considerations on 2 cases). Polskie arch.med.
wewn. 30 no.6:843-844 '60.

1. Z III Kliniki Chorob Wewnętrznych A.M. w Krakowie Kierownik:
prof.dr med. J.Aleksandrowicz.

(DIABETES MELLITUS etiol)
(ADRENAL CORTICAL HORMONES toxicol.)

OSTERCZY, Hanna (Krakow, ul Krowoderska 28 m. 6.)

Retinal detachment. Klin. oczna 28 no.1:45-47 1958.

1. Z Kliniki Chorob Oczu A. M. w Krakowie Kierownik: prof. dr med.
M. Wilczek.

(RETINAL DETACHMENT, case reports
pathol. & ther. (Pol))

CSTERCZY-SLIWINSKA, Hanna

Results of surgical therapy in developmental cataract. *Klin. oczna*
31 no.3:235-240 '61.

1. Z Kliniki Chorob Oczu AM w Krakowie Kierownik: prof. dr med.
M. Wilczek.

(CATARACT EXTRACTION)

OSTERLOFF, L.

Trends in the development of the electric equipment of automobiles. Pt. 3

p. 352 (Technika Motoryzacyjna) Vol. 7, no. 10, Oct. 1957, Warszawa, Poland

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VOL. 7, NO. 1, JAN. 1960

OSTERMAN, L.

"Three Evenings of Cybernetics. A Popular Science Essay," Teatr [The Theater],
1959, No. 5, Pages 157 - 166.

... ..
DIANOV-KLOKOV, V.I.; STAKHOVSKIY, A.D.; OSTERMAN, L.A.

Amplifier input units for bolometers and thermocouples. Iss. tekhn.
no.2:37-41 Mr-Ap '57. (MIRA 10:6)
(Bolometer) (Amplifiers, Electron-tube) (Thermocouples)

OSTERMAN, L.A.

Registration of nerve action potentials in unscreened rooms. [with
summary in English]. Biul. eksp. biol. i med. 45 no.6:109-112 Je '58

(MIRA 11:8)

1. Iz eksperimental'noy laboratorii (zav. kand. med. nauk V.M. Khayutin)
Instituta normal'noy i patologicheskoy fiziologii (dir. - deyatvitel'nyy
chlen AMN SSSR V.N. Chernigovskiy) AMN SSSR, Moskva. Predstavlena
deyatvitel'nyy chlenom AMN SSSR V.V. Parinym.

(NEUROPHYSIOLOGY, appar. & instruments,

for registration of nerve action potential in unscreened
room (Rus))

OSTERMAN, L.A.

Simple attachment for stimulators [with summary in English].
Biofizika 4 no.2:238-241 '59. (MIRA 12:4)

1. Institut normal'noy patologicheskoy fiziologii AMN SSSR,
Moskva.

(PHYSIOLOGY, appar. & instruments,
attachment to electric stimulator (Rus))

OSTERMAN, H.A., kandidat arkhitektury; KAUMOVA, N.A., inzhener;
KHRUSTOV, S.Ya., inzhener; SHAPOVALOV, I.S., inzhener

Plans for apartment houses designed by GLAVSTANDARTDOM. Rats. i
izobr.preds. v stroi. no.102:15-24 '55. (MIRA 8:10)
(Buildings, Prefabricated)

S/058/63/000/003/011/104
A160/A101AUTHOR: Ostern, N. B.

TITLE: The theory of direct reactions

PERIODICAL: Referativnyy zhurnal, Fizika, no. 3, 1963, 4, abstract 3833 (In collection; "Stroyenie Yadra". M., Gosatomizdat, 1962, 128 - 139)

TEXT: The method of distorted waves in Born's approximation is discussed. This method is a theory of perturbation by the interaction potential by using, instead of the full wave function Φ^+ , the wave function Φ_1^+ which describes only elastic scattering in the channel i , whereby the function Φ_1^+ itself is obtained as a solution of the optical model equations. Exact expressions for the various characteristics of the reactions within the limits of the method of distorted waves by Born's approximation are complicated. Therefore, when calculating the potential, the approximation of the zero radius of the nuclear forces action is frequently used. This is one of the weak spots of the method. It is indicated that the theory investigated can be simplified if the direct processes are interpreted as surface processes taking place at a certain fixed value of the

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The theory of direct reactions

S/058/63/000/003/011/104
A160/A101

radius R (Referativnyy zhurnal, Fizika, no. 6, 1960, 13400). This leads to the fact that the angular distribution depends only on the R , the optical potential and the fully transmitted momentum L , and does not depend on the details of the reaction mechanism. A number of supplements to the experiment are reviewed; presented are data of the angular distribution of the reactions (α, p) , (α, α') (d, α) for which theoretical curves were plotted by the method of distorted waves by Born's approximation. In the cases investigated, a quite satisfactory correspondence is observed between the theory and the experiment. In connection with the idea of the applicability of the surface reactions, a contribution of various partial waves to the reaction amplitude is discussed. See also Referativnyy zhurnal, Fizika, 1961, 6B383.

S. Timashev

[Abstracter's note; Complete translation]

Card 2/2

OSTERN, P

CA

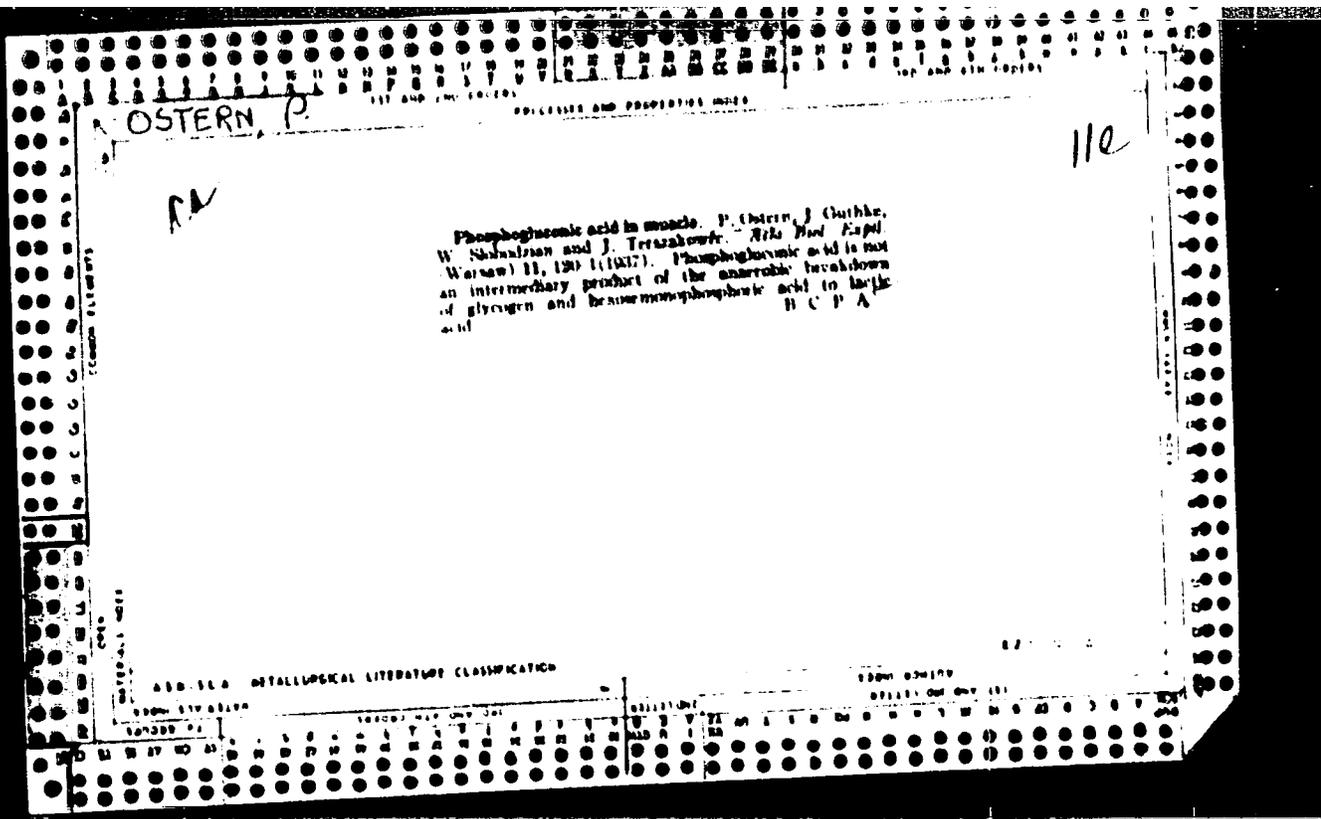
The supposed synthesis of uric acid in minced liver. P. (STERNARD) K. PADNAR
 (Acta Biol. Exptl. (Warsaw) 5, 19-31 (19-21 in German) (1931) - Przybycki's statement
 can synthesize uric acid from urea is dubious. Probably the method of Folin and Denis
 applied to the detn. of uric acid in liver is faulty. The following modification of this
 method was adopted: Minced liver was treated with 0.005 N AcOH to remove albu-
 min, uric acid and purine bases were pptd according to Krüger and Schmidt and the
 filtrate was acidified and evapd. Finally uric acid was crysd. purified and detd
 according to Folin. In addn. the total amt. of purines was detd. Results obtained
 with this modified method contradict P.'s conclusions. Uric acid formed in the process
 is proportional to the decompn. of purine bases. Urea is of no influence on the decompn.
 process. The amt. of uric acid formed is much less than that given by P. in chicken
 and goose livers, 4.4 mg % against P.'s value 80-100 mg % is formed at the beginning
 and 21 mg % in 14 days and 34 mg % in 30 days, while the purine content decreases from
 130 to 90 mg % N. Thus there is no reason to assume a synthesis of uric acid in minced
 liver and liver exts. by a hypothetical enzyme. J. WITWELAK

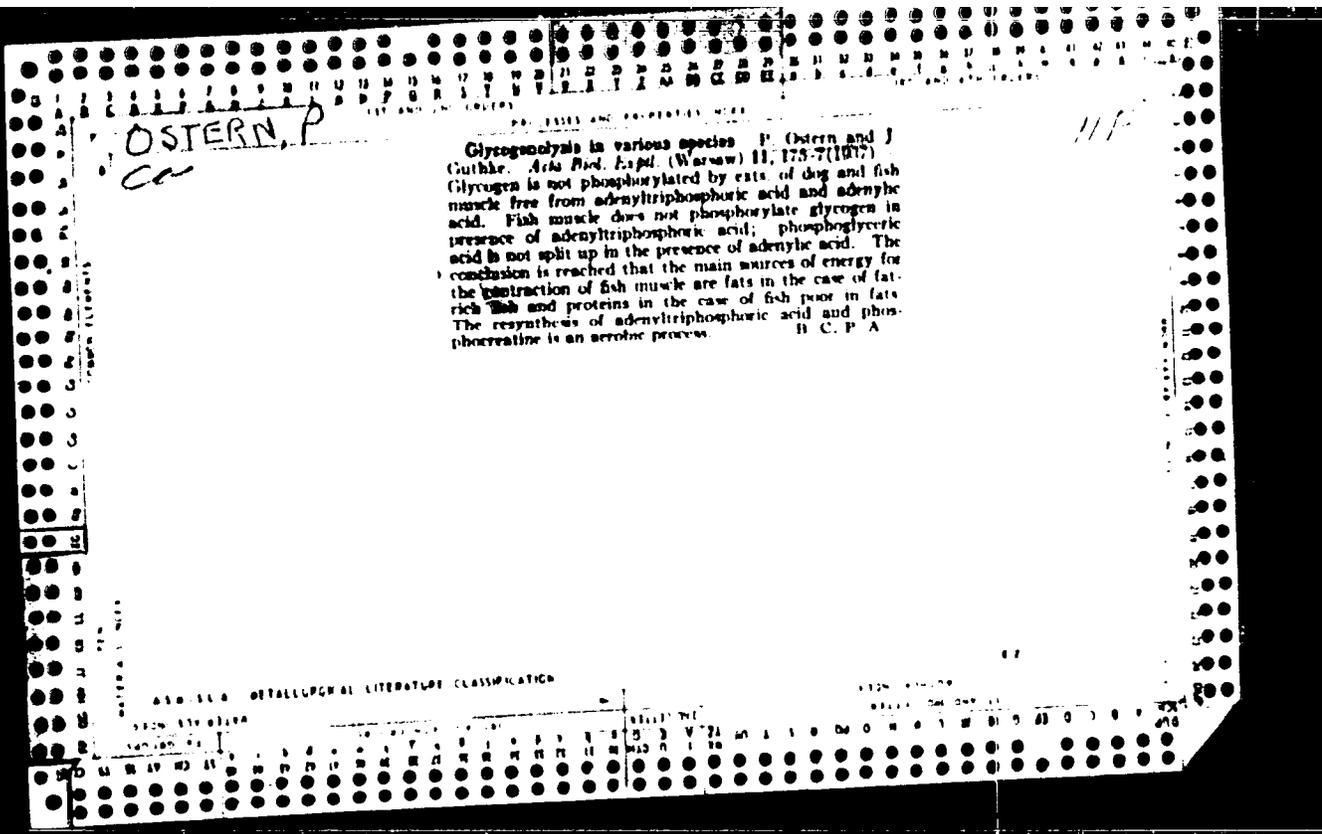
OSTERN, P.

Nature and physiological function of muscle ammonia-glycose, and the contribution of chemical processes in muscle. J. K. Parnas, P. Ostern and I. Mann. *Recumbi Chem.* 10, 1335-76(1961); cf. *C. A.* 29, 2530

Adenosinetriphosphoric acid (I) does not undergo deamination in muscle, but acetyl acid (II) arising from I may be reconverted to I or be deaminated to inosic acid (III). The chief processes taking place during contraction are: I + 1/2 (glycogen) + H₂O → II + Harden-Young ester (IV); II + phosphocreatine (V) → I + creatine (VI); VI + IV → V + 20HC(HMe)C(H)H, when the reaction of glycolysis is completed, the reaction II + H₂O → III + NH₃ takes place. During the resting stage re-synthesis of I from III is possible.

U. C. A.





GAVRILOV, L.G., inzh.; OSTERNIK, E.S., inzh.

Mechanical tests of TGV-200 turbogenerators with instantaneous load drop. Elek. sta. 35 no.2:83-84 F '64.
(MIRA 17:b)

OSTERNIK, E. S.

Strain-measuring bridge with resistance boxes. Izm. tekhn.
no.10:27-29 0 162. (MIRA 15:10)

(Strain gauges) (Bridge circuits)

OSTERNIK, E.S. (Khar'kov)

Errors in calculating a shallow shell as a plate. *Prykl. mekh.*
7 no.5:512-515 '61. (MIRA 14:10)

1. Khar'kovskiy institut turbogeneratorov i teplovoznogo elek-
trooborudovaniya.

(Elastic plates and shells)

29226

S/198/61/007/005/006/015
D274/D303

24 4200

AUTHOR: Osternik, E.S. (Khar'kiv)

TITLE: On the calculation error due to approximating a shallow shell by a plate

PERIODICAL: Prikladnaya mekhanika, v. 7, no. 5, 1961, 512 - 515

TEXT: A modified method is proposed for estimating the error in calculating shells which are under uniform normal loads. Such shells are widely used in machine construction and building engineering. The method is based on S.G. Mikhailin's theorem on operators. A thin shallow shell is considered, part of whose contour is rigidly clamped and the other part free. An orthogonal system of coordinates is used $(\alpha_1, \alpha_2, \alpha_3)$. S denotes the middle surface. The differential equations of the bending of the middle surface are

$$P\bar{w} = \bar{q} \quad (1)$$

where P is a differential operator and \bar{q} - the load per unit area.

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D274/D303

On the calculation error due ...

By the conditions of the problem

$$q_3 = q = \text{const} > 0, \quad q_1 = q_2 = 0. \quad (2)$$

By Mikhlín's theorem, the relative error in bending, upon replacing the shell by a plate, is

$$\frac{|\bar{w} - \bar{w}_0|}{|\bar{w}_0|} \leq \eta, \quad (4)$$

where

$$\eta = \max \left(\frac{|\delta'|}{1 - \delta'}, \frac{|\delta''|}{1 + \delta''} \right), \quad (5)$$

and

$$-\delta' (P_0 \bar{w}, \bar{w}) \leq (P \bar{w}, \bar{w}) - (P_0 \bar{w}, \bar{w}) \leq \delta'' (P_0 \bar{w}, \bar{w}); \quad (6)$$

here \bar{w} and \bar{w}_0 are displacement vectors at the corresponding points of the shell and of the plate, P_0 is the differential operator of the plate. The problem amounts to determining δ' and δ'' from two

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S/198/61/007/005/006/015
D274/D303

On the calculation error due ...

systems of inequalities. The error estimate is correct if both ϵ are smaller than unity. First inequality: From the theory of surfaces it follows that

$$\iint_S w_3 dS = \iint_{S_0} w_3 (1 + \beta) dS_0 \quad (7)$$

where

$$1 + \beta = \sqrt{\frac{EG}{E_0 G_0}} > 1 \quad (8)$$

(E, G being the coefficients of the quadratic forms S and S_0). By Eq. (3) and (7)

$$(P\bar{w}, \bar{w}) \leq q(1 + \beta) \iint_{S_0} w_3 dS_0. \quad (9)$$

Using the Schwartz-Bunyakovs'kiy inequality, one obtains

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D274/D303

On the calculation error due ...

$$\left[\iint_{S_0} w_3 dS_0 \right]^2 \leq S_0 \iint_{S_0} w_3^2 dS_0. \quad (10)$$

Two more inequalities are obtained; thereupon

$$\left[\iint_{S_0} w_3 dS_0 \right]^2 \leq \frac{S_0}{b^2(1 + \beta)_{\min}} (P_0 \bar{w}, \bar{w}). \quad (13)$$

Evidently

$$\iint_{S_0} w_3 dS_0 \geq 0. \quad (14)$$

Hence

$$(P\bar{w}, \bar{w})^2 \leq q^2 [(1 + \beta)_{\max}]^2 \left[\iint_{S_0} w_3 dS_0 \right]^2. \quad (15)$$

From (13) and (15) one finally obtains

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S/198/61/007/005/006/015
D274/D303

On the calculation error due ...

$$(P\bar{w}, \bar{w}) \leq A(P_0\bar{w}, \bar{w}), \text{ where } A = \frac{S_0 q^2 [(1 + \beta)_{\max}]^2}{(1 + \beta)_{\min}}. \quad (16)$$

Second inequality: One obtains

$$(P\bar{w}, \bar{w}) \leq B(\eta + 1), \text{ where } B = q(1 + \beta)_{\max} \iint_{S_0} \bar{w}_0 / dS_0. \quad (21)$$

From (5) follows that

$$\eta \geq \frac{\delta^i}{1 - \delta^i} \quad (23); \quad \eta \geq \frac{\delta^n}{1 + \delta^n}. \quad (24)$$

Now from (16), (21), (6) and (23) the system of inequalities for δ^i :

$$(P\bar{w}, \bar{w})^2 \leq A(P_0\bar{w}, \bar{w}), \quad (P\bar{w}, \bar{w}) \leq B(\eta + 1), \quad -\delta^i(P_0\bar{w}, \bar{w}) \leq \quad (25) \quad \lambda$$

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S/198/61/007/005/006/015
D274/D303

On the calculation error due ...

$$\leq (P\bar{w}, \bar{w}) - (P_0\bar{w}, \bar{w}), \quad \eta \geq \frac{\delta'}{1 - \delta'} \quad (25)$$

is set up; analogously for δ'' :

$$(P\bar{w}, \bar{w}) \leq B(\eta + 1), \quad (P\bar{w}, \bar{w}) - (P_0\bar{w}, \bar{w}) \leq \delta''(P_0\bar{w}, \bar{w}), \quad (26)$$

$$\eta \geq \frac{\delta''}{1 + \delta''}$$

Hence the proposed method amounts to solving the system of inequalities (25) and (26). There are 3 Soviet-bloc references.

ASSOCIATION: Kharkivs'kyy in-t turbogeneratoriv ta teplovoznogo elektroustatkuvannya (Khar'kiv Institute of Turbogenerators and Heat- and Power Equipment)

SUBMITTED: July 4, 1960

Card 6/6

OSTERNIK, O.I.

Utilization of reclaimed wool in the "Lenin" Worsted
tion Combine in Dunayevtsy. Leh. prom. no. 4319-20 G.D. '64
(MIRA 1821)

OSTERNIK, S. A.

Cand. Tech. Sci.

Dissertation: "Investigation of the Shrinkage of Wool fabrics." 1971

Moscow Inst. of National Economy (MNI)

G. V. Ilexanov.

SO vecher. 1971 Moskva
Sum 71

Chester

Letter to the Editor: [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]

Soviet source: [illegible] [illegible] [illegible]

Current Direct [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]

КОМПРЕССОРЫ, ПАМ

Kompressory i vozdukhoduvki; teoriia, raschet i konstruktsiia. khar'kov, Universal'noe nauchnoe izd-vo, 1929. v. 2. Illus.

Contents. - t. 2. - Turbokompressory i turbovozdukhoduvki.

(Compressors and blowing engines; theory, calculation and design. v. 2. Turbo-compressors and turbo-blowers.)

DLC: TJ990.0818

SO: Manufacturing and Mechanical Engineering in the Soviet Union. Library of Congress, 1953.

BOGUNOV, Ye.I.; OSTERTAG, R.Ya.

Gas logging of oil prospecting wells in Irkutsk Province. Razved.
i prom. geofiz. no. 34:14-21 '60. (MIRA 13:12)
(Irkutsk Province--Oil well logging) (Gas, Natural)

SOV-25-58-10-45/48

AUTHOR: Oster-Volkov, N.N., Itinskiy, V.I., Engineers

TITLE: None given

PERIODICAL: Nauka i zhizn, 1958, Nr 10, pp 79 - 79

ABSTRACT: The Institute of Plastics has developed new synthetic resins under the supervision of Professor I.S. Petrov. Tests, successfully carried out, proved that the synthetic resin "FA" can be subjected to temperatures between -60° and $+320^{\circ}$ and for a short period even to 2000° C.

ASSOCIATION: Vsesoyuzniy nauchno-issledovatel'skiy institut plastmass
(All-Union Scientific Research Institute of Plastics)

1. Plastics--Temperature factors

Card 1/1

ITINSKIY, V.I.; KAMENSKIY, I.V.; OSTER-VOLKOV, N.H.

Cementless plastic concrete. Plast.massy no.6:19-22 '60.
(MIEA 13:11)

(Concrete)

(Plastics)

89962

S/097/60/000/011,0-2,007
A003/A029

15.3000 1-15.2209

AUTHORS: Yelshin, I. M., Candidate of Technical Sciences,
Oster-Volkov, N. N., Engineer

TITLE: Plastoconcrete on the Base of "ΦA" ("FA") Monomer

PERIODICAL: Beton i zhelezobeton, 1960, No. 11, pp. 503-506

TEXT: A plastoconcrete was investigated, in which cement was substituted by the synthetic "FA" furfurole-acetone resin, which is a condensation product of furfurole with acetone in an alkaline medium. The Ferganskiy gidroliznyy zavod (Fergana Hydrolysis Plant) was the first in the USSR to develop the production of this monomer. The plastoconcrete based on this monomer was tested at the VNII-plastmass (VNII of Plastics) and MKhTI im. Mendeleyev. In the case of a coarse filler the following formulation was used: 1 part of filler, 0.09 "FA" monomer, 0.02 furfurole, 0.03 benzenesulfoacid; in the case of sand filler: 1 part of sand, 0.14 "FA" monomer, 0.02 furfurole, 0.04 benzenesulfoacid. The hardening lasted from several minutes to several months. The final strength depended on the amount of acid present and on the temperature of the surrounding air

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89962

Plastoconcrete on the Base of "φA" ("FA") Monomer S/097/60/000/011/002/007
A003/A029

The optimum amount of acid is 25 - 30 % of the monomer weight. The results of the strength tests are shown in Table 1.

Type of test	Strength limit in kg/cm ² at the age of:					
	1 day	3 days	7 days	28 days	90 days	180 days
Compression .	313	410	500	533	656	721
Stretching ..	-	37	-	72	-	-
Bending	-	93	130	160	-	-

In order to obtain a 28-day strength already after one day the amount of acid must be raised. The tests for watertightness showed that samples 25 mm thick withstood a pressure of 14 atm at the age of 7 days. Tests carried out at -20°C in the course of 50 cycles on 7-day samples did not reveal changes in the weight and the strength of the samples. The wear resistance is 10 times higher than in cement samples of the composition 1 : 3 at the age of 33 days. Plastoconcrete has a good adhesion to dry cement samples, but the adhesion to wet samples is low. Sand with carbonate admix-

Card 2/3

99062

Plastoconcrete on the Base of "FA" ("FA") Monomer S/097/60/000/011:002.007
A003/A029

tures can be used as filler if the amount of catalyst (acid) is increased. Industrial tests of the plastoconcrete were made at the Verkhne-Chirchik power station (UzSSR) and at the Pal'ma dam on the Isfayrom-Say river. The tests have shown that plastoconcrete can be prepared and laid by methods used with cement concrete. Tests were also conducted by NIIKhimash and TsNIIPodzemshastroy. They have shown that plastoconcrete is resistant to acids of various concentration, alkalies, solvents, etc. It has good dielectric properties. Wood and other organic material is protected from rotting when coated with this concrete. Aging tests conducted since 1952 did not show any changes in its quality. It is hoped to reduce the cost of one m³ of plastoconcrete from 1,600 to 600 - 700 rubles by improving the production methods for furfurole. There are 2 tables and 1 photograph ✓

Card 3/3

OSTER-VOLKOV, N.N.

OSTER-VOLKOV, N.N., inzh.; ITINSKIY, V.I., inzh.

~~OSTER-VOLKOV, N.N.~~
New mineral organic cementless concrete. Izobr. v SSSR 2 no.12:8-9
D '57. (MIRA 10:12)

(Concrete)

OSTFELD, M.

Certain achievements in the factory construction for cotton picking and
filling in cotton-spinning mills. p.8.
(INDUSTRIAL TEXTILES. Vol. 3, no. 1, Jan. 1957. Rumania)

SO: Monthly List of East European Accessions (EEL) LC, Vol. 6, no. 7, July 1957. Uncl.

Page 79

OSTFELD, M.

Profitability of large packages on cotton ring frames. p. 51.

INDUSTRIA TEXTILA. (Asociatia Stiintifica a Inginerilor si Technicienilor din Romania si Ministerul Industriei Udistre) Bucuresti, Rumania. Vol. 10, no. 2, Feb. 1959.

Monthly Lists of East European Accessions (EEAI) LC, Vol. 9, no. 8, Aug. 1959.

Uncl.

OSTFELD, M.

OSTFELD, M. Suspended conveyor. p. 351.

Vol. 6, no. 10, Oct. 1955
INDUSTRIA TEXTILA
Bucuresti, Romania

So: Eastern European Accession Vol. 5 No. 1 April 1956

OSTFELD, M.

New system of pressure in Textima ring spinning frames. p. 439

INDUSTRIA TEXTILA, Bucuresti, Vol 6, No. 12, Dec., 1955

SO: East European Accessions List (EEAL) Library of Congress, Vol 5, No. 7, July, 1956

OSTFELD, M.

New systems of pressure on fly frames in cotton spinning mills. p. 151
INDUSTRIA TEXTILA, Vol. 7, No. 4, Apr. 1956, Rumania.

SO: East European Accessions List, L. of C., Vol. 5, No. 10, Oct. 1956.

CS 10000 R 11

BAKHVALOV, Sergey Vladimirovich; BABUSHKIN, Lev Ivanovich; IVANITSKAYA, Valentina Pavlovna; OSTIANU, N.M., red.; NATAPOV, M.I., tekhn. red.

[Analytic geometry; a manual for teachers' colleges] Analiticheskaya geometriia; uchebnik dlia pedagogicheskikh institutov. Pod red. S.V. Bakhvalova. Moskva, Gos. uchebno-pedagog. izd-vo M-va prosv. RSFSR, 1958. 326 p. (MIRA 11:7)

(Geometry, Analytic)

DAVYDOV, Nikolay Alekseyevich; KOROVKIN, Pavel Petrovich; NIKOL'SKIY,
Vladimir Nikolayevich; OSTIAFU, N.M., red.; SMIRNOV, G.I., tekhn.red.

[A collection of problems in mathematical analysis] Sbornik
zadach po matematicheskomu analizu. Izd.2-oe. Moskva, Gos.uchebno-
pedagog.izd-vo M-va prosv.RSFSR, 1957. 194 p. (MIRA 11:1)
(Mathematical analysis--Problems, exercises, etc.)

OSTIAND, U.P.

Geometry of a surface of affine complex space. *Math. Ann.* 283:156-170, 1980.

MSC
MRA 14A15

OSTIANU, N.M.

The geometry of an n -dimensional surface of a $(2n - 1)$ -dimensional projective space. Dokl. AN SSSR 136 no.4:775-778 P '61.

(MIRA.14:1)

1. Predstavleno akademikom P.S. Aleksandrovym.
(Geometry, Differential)

OSTIANU, N. M.

Call Nr: AF 1108825

Transactions of the Third All-union Mathematical Congress * (Cont.) Moscow, Jun-Jul '56, Trudy '56, V. 1, Sect. Rpts., Izdatel'stvo AN SSSR, Moscow, 1956, 237 pp.
Ostianu, N. M. (Moscow). On Geometry of Surfaces in
Affine-symplectic Multimorphic Space. 160-161

Mention is made of Laptév, G. F.

Penzov, Yu. Ye. (Saratov). Classification of Geometric Objects. 161-162

Mention is made of Vagner, V. V., Dubnov and Liber.

Pervikova, V. N. (Moscow). Fundamental Theorem of Central Axonometry for n -Dimensional Spaces. 162-163

Petrov, P. I. (Kazan'). Classification Principle of Riemannian Manifolds According to Their Differential Invariants, and its Application. 163

Mention is made of Skhouten, I. A.

Card 52/80

OSTIANU, N.M.

ZHTEL', Semen Isaakovich; OSTIANU, N.M., red.; KRYS, I.G., tekhn.red.

[Geometry of the line and geometry of the compass] Geometriia lini i geometriia tsirkul'a. Izd. 2-oe, dop. Moskva, Gos. uchebno-pedagog. izd-vo M-ve prosv. RSFSR, 1957. 162 p. (MIRA 11:5)
(Geometry, Plane)

ZNAMENSKIY, Mikhail Alekseyevich; OSTIANU, N.M., redaktor; RYBIN, I.V.,
tekhnicheskiy redaktor

[Terrain measurements; handbook for students of the physics and
mathematics departments of the pedagogical institutes] Izmeritel'-
nye raboty na mestnosti; posobie dlia studentov fiziko-matematicheskikh
fakul'tetov pedagogicheskikh institutov. Moskva, Gos. uchebno-
pedagog. izd-vo M-va prosv. RSFSR, 1956. 189 p. (MLBA 10:4)
(Surveying)

FD-1752

Card 2/2

of Agriculture); Engineer A. S. Ilyakhinskiy (Heavy Industry Electric Project); Ye. S. Snagovskiy (Cand. Tech. Sci.; Ministry of Coal Industry); Engineer Yu. S. Tsitkin (Ukrainian State Planning Institute for Gas); B. S. Sotskov (Dr Tech. Sci.; Institute of Automatics and Telemechanics); V. N. Roginskiy (Cand. Tech. Sci.; Lab. for Working Sci. Problems of Wire Communications, Acad. Sci. USSR); V. A. Zhzhikashvili (Institute of Automatics and Telemechanics); O. A. Goryainov (Cand. Tech. Sci.; Moscow Power Institute); V. N. Tutevich (Cand. Tech. Sci.; Inst. Auto. and Telem.); F. A. Katkov (Cand. Tech. Sci.; Institute of Electrical Engineering, Acad. Sci. Ukr. SSR); Engineer N. M. Krasnikov (State Planning Trust for Hydroelectric Power Enterprises); V. A. Moroz (Academy of Communal Economy); V. Ye. Kazanskiy (Engineer; State Trust for the Organization and Rationalization of Regional Electric Power Stations and Networks); Engineer V. D. Ambrosovich (Factory "Elektropul't"); V. N. Mikhaylovskiy (Cand. Tech. Sci.; Institute of Machine Science and Automatics, Acad. Sci. Ukrainian SSR); S. A. Ginzburg (Central Lab. Electromagnetism (?), Ministry of Electric Power Stations).

OSTIANU, V.M.

Synthesis of contact circuits with step-by-step switching. Dokl.
AN SSSR 103 no.5:827-830 Ag '55. (MIRA 9:1)

1. Institut avtomatiki i telemekhaniki Akademii nauk SSSR. Prod-
stavleno akademikom V.S.Kulebakinyam.
(Electric circuits)

GAVRILOV, M.A., otvetstvennyy redaktor; IL'IN, V.A., redaktor; ZHOZHNIKASHVILI, V.A., redaktor; PETROVSKIY, A.M., redaktor; MALOV, V.S., redaktor; OSTIANU, V.M., redaktor; POBEDIMSKIY, V.V., redaktor izdatel'stva; KISHILEVA, A.A., tekhnicheskiiy redaktor

[Remote control in the national economy] Tlemekhanizatsia v narodnom khoziaistve; materialy soveshchaniia. Moskva, Izd-vo Akademii nauk SSSR, 1956. 481 p. (MLRA 9:8)

1. Soveshchaniye po telemekhanizatsii v narodnom khoziaistve SSSR. Moscow, 1954.

(Remote control) (Telemetering)

OSTIANU, V. M.

"A Synthesis of Circuits with Step-by-Step Switches," pp 2-3-26, 1956, 10 ref

Abst: The article gives a short account of the algebra of contact circuits with step-by-step switches; on this basis an examination is made of the structural synthesis of contacts of a multiterminal network with step-by-step switches.

SOURCE: Sbornik Rabot po Avtomatike i Telemekhanike. In-t Avtomatike i Telemekhaniki AN SSSR (Collection of Works in Automatics and Telemechanics. Institute of Automatics and Telemechanics of the Academy of Sciences USSR), Moscow, Publishing House of the Academy of Sciences USSR, 1956

Sum 1854

OSTIANN, V. K. (Sci. Corr.); YURGENSON, P. I. (Cand. Tech. Sci.);
SHCHERBIN, P. P. (Cand. Tech. Sci.); ASTULAYEV, P. (Sci. Corr.)

"Construction of telecontrol systems."

paper read at the Session of the Acad. Sci. USSR, on Scientific Problems of
Automatic Production, 1-4 October 1962.

Automatika i telemekhanika, No. 2, 1963, p. 12-162.

9015229

US JIARU, U MI

Akademiya nauk SSSR. Institut avtomatiki i telemekhaniki
Avtomatika i telemekhanika: sbornik (Automation and Telemechanics:
Collection of Articles) Moscow, 1956. 146 p. 5,000 copies
Printed

Resp. Ed.: Ya.Z. Tsypkin; Ed. of Publishing House: V.A. Kotov;
Tech. Ed.: I.B. Guseva

NOTE: This collection of articles is intended for specialists
in automation and remote control.

CONTENTS: The book contains fifteen papers presented at the Fourth
and Fifth scientific and technical conferences, held in 1955
and 1956, by jurists members of the staff of the Institut avtomatiki
i telemekhaniki (Institute of Automation and Telemechanics),
Academy of Sciences, USSR. The papers are based on the tradi-
tional research of their authors. The collection consists of
five parts: Automatic Control, Components of Automatic and
Remote Control Systems, Automated Electric Drive, Automatic
Checking, and Remote Control.

Abdullayev, D.A. Some Problems of Building Remote Control
Systems with Dispersed Points of Operation 159
The author investigates the problem of discriminative selection of
objects of remote control on the basis of discriminative selection of
equipment so as to efficiently plan the layout of control systems with
dispersed points of operation. The task is control systems with
relays in dispatching points. With a small number of objects
in operational points, the author finds most efficient the
principle of a distributive switch, which was developed at
the Remote Control Laboratory of IAT. There are 7 references,
6 Soviet and 1 English. No personalities are mentioned.

Lezhnin, V.A. Optimum Time of Quantizing a Signal in the
Presence of Noise 119
The author derives formulas for determining the optimum time
of quantizing for the spectral function of a given signal, a
given method of transmission, and a certain noise level in
the communications channel, which will result in the smallest
total error. The author uses the Kolmogorov theorem for this
discussion. There are 3 Soviet references. No personalities are
mentioned.

Orlov, M.M. Cascade Method of Synthesizing Contact Circuits
Equipped with Step Switches 172
The author discusses a method of synthesizing like-terminal
networks with step switches, which is a generalization of the
cascade method proposed by the author. The author also discusses
contact (1, k)-terminal networks. The author also discusses the
author terms "cascade" connections (borrowing from the author
output of the first multiterminal network is connected to the
input of the second multiterminal network). The author
presents an example of such synthesis. There are 3 references,
7 Soviet and 1 English.

Pivovarov, G.M. Cascade Method of Synthesizing Symmetrical Contact
Circuits 127
The author presents a graphical variant of the cascade method, spe-
cially adapted for engineering symmetrical and related like-ter-
minal networks. He considers a graphical method to be a much
simpler one for engineering purposes than the analytical method,
as applied to (1, k) terminal networks. He suggests the use for
the synthesis of quasi-symmetrical contact circuits and contact
circuits having one input and one or several outputs. There
are 9 references, 7 Soviet, 1 Czech and 1 English.

Slivov, V.M. Remote Control System for Dispersed Objects 133
The author attempts to find a solution for a remote control
system which would be simple in structure, use a small number
of wires with the minimum possible amount of relay equipment
at each control point, and have a fairly large radius of action.
The author proposes a method of synthesizing such systems.
Several methods used and concludes that the principle of
principle of "distributive selection" with dispersed objects
satisfactory results, as demonstrated in laboratory tests over
a four-month period. There are 3 Soviet references. No per-
sonalities are mentioned.

S/044/62/000/012/043/049
A060/A000

~~0.100~~
AUTHOR: Ostianu, V. M.

TITLE: On a class of calculating networks

PERIODICAL: Referativnyy zhurnal, Matematika, no. 12, 1962, 48,
abstract 12V276 (Bull. math. Soc. sci. math. et phys.
RPR, 1958, v. 2, no. 3, 319 - 328)

TEXT: The problem of transmission of discrete signals with error correction is considered. For certain methods of coding relay-contact networks are constructed which correct single errors.

[Abstracter's note: Complete translation]

Card 1/1

AUTHOR: Ostianu, V.M.

SOV-26-58-3-33/51

TITLE: The Theory of Devices with Relay Operation (Teoriya ustroystv reley'nogo deyatviya)

PERIODICAL: Priroda, 1958, Nr 3, pp 110-111 (USSR)

ABSTRACT: The Institut avtomatiki i telemekhaniki AN SSSR (Institute of Automation and Telemechanics of the AS USSR) convened an All-Union meeting in Moscow in October 1957 to discuss the present situation and the further development of the theory of relay circuits. The meeting was attended by over 300 delegates of scientific research organizations, plant laboratories and enterprises. Gr.K. Moisil, Corresponding Member of the Rumanian AS, Kal'mar, Scientific Assistant of the Institut matematiche-skikh mashin (Institute of Mathematical Machines) of the Czech AS, F. Svoboda, and other scientists were invited. A total of 38 papers were delivered at the meeting. Doctor of Technical Sciences, Professor M.A. Gavrilov reported at "The Present Condition and the Basic Directions of Development of the Theory of Devices With Relay Operation". Doctor of Physico-Mathematical Sciences, Professor S.A. Yanovskaya "On Mathematical Logics and its Technical Applications".

Card 1/2

The Theory of Devices with Relay Operation

SOV-26-59-3-35/51

Academician Gr.K. Moisil, on "The Development of the Theory of Relay-Contact Schemes in the Rumanian People's Republic". Together with the meeting, literature on the theory of relay circuits and such exhibits as a machine with a capacity of 20 relays, which can analyze projected as well as already finished relay circuits, a matrix analyzer of relay-contact circuits, a machine for the synthesis of relay devices, an automatic telephone exchange for 100 subscribers' numbers and models of an itinerary indicator for subway stations were on display.

ASSOCIATION: Institut avtomatiki i telemekhaniki AN SSSR-Moskva (Institute of Automation and Telemechanics of the AS USSR-Moscow)

1. Electric relays--Theory

Card 2/2

MOSKATOV, G.K.; OSTIANU, V.M.

All-Union conference on the theory of relays. Avton. i telem.
19 no.9:896-900 S '58. (MIRA 11:10)
(Electric relays--Congresses)

AUTHOR: Istiamu . . .

TITLE: Problems in the Theory of Relay Devices

3-1-30/21

All-Union Conference in Moscow (Vopr. teoryi i praktiki soveshchaniye v Moskve).

PERIODICAL: Vestnik AN SSSR, 1977, No. 1, Pt. 131-132 (USSR).

ABSTRACT: The Institute for Automation and Remote Control AN-USSR organized a Conference on the Theory of Relay Devices from September 2 to October 2, 1977. The following problems figured in the agenda: Synthesis, analysis, reconstruction of the relay structure and effect, the best construction and structure, a solution of analytical processes, etc. The council was attended by representatives of scientific institutions and industrial firms, as well as by scientists from other countries. The following reports were made:

- 1) A. L. Letay stressed the importance of the part played by relay devices in the automation of the finishing process.
- 2) L. A. Gavrilya characterized the present stage and the main trends of the development of these devices, and said that with respect to work on the field, the USA and the USSR ranged first, and the German People's Republic ranged third.
- 3) S. A. Ivanova investigated the characteristic features of the

Card 1/4

Problems in the Theory of Relay Devices.
All-Union Conference in Moscow

3-11-74/2

- ... as well as the fields of their theoretical application.
- 1) ... regular member of the Romanian Academy, stressed the ... scientists (N. I. ...).
 - 2) ... the dimension of explicit ...
 - 3) ... report on certain ...
 - 4) ... elementary logical functions.
 - 5) ... improved representation of ...
 - 6) ... possibility of constructing ...
 - 7) ... of the existing ...
 - 8) ...
 - 9) ...
 - 10) ...
 - 11) ...
 - 12) ...
 - 13) ...

Part 24

Problems in the Theory of Relay Devices.
All-Union Conference in Moscow.

30-1-36/38

- 14) F. K. Kozlovskii (Rumania): On the method of constructing dual-tipole contacts.
- 15) V. N. Roginskiy: On the graphic method of constructing $(2, k)$ -poles.
- 16) A. S. Kuznetsov: On the application of the methods of probability diagrams.
- 17) V. I. Shastayev: On the algebraic method of analysis and synthesis.
- 18) Ya. I. Bekler: On the graphic method of the construction of relay contact schemes.
- 19) V. S. Lashnev: On the method of determining the minimum relay number.
- 20) L. Nedelka (Rumania): On electronic circuits with relay effect. J. Planin.
- 21) L. Kantor, Corresponding member of the Hungarian Academy of Science: On the logical Seged machine.
- 22) S. Dvornik (Czechoslovakia): On the working principle of a machine for the synthesis of contact circuits.
- 23) A. A. Kuznetsov: On a machine for the synthesis of contact circuits.

Card 3/4

**Problems in the Theory of Relay Devices.
All-Union Conference in Moscow.**

Ag-1-3-33

1. V. Lashov.
2. V. K. ...
- 3.) V. V. ... On problems concerning the automation of the analysis of relay schemes.
4. V. ...

The results of the field of the theory of devices with relay effect of the investigated is described as insufficient. In connection with the ... an exhibition of devices and publications dealing with this field was organized.

AVAILABLE: Library ...

1. Automation-Conference
2. Scientific reports-USSR

Jan 1, /.

• 9(3)

AUTHORS: Gavrilov, M. A., Gatiann, V. M.,
Rodin, V. N., Timofeyev, B. L.

SOV/20-101-6-12/50

TITLE: The Realization of Discrete Schemes of Correctors
(Realizatsiya skhem diskretnykh korrektorov)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 123, Nr 6, pp 1025-1026
(USSR)

ABSTRACT: Correctors most efficiently can be put into practice in a class of one-period schemes. The schemes of discrete correctors which belong to the class of conversion schemes have some special features. The present paper deals with these peculiarities and also with the realization of one of the corrector types on contact relays, crystal elements, and hysteresis elements. The construction of a corrector on the basis of an electromechanical relay can be reduced to the construction of a $(1, n)$ pole which puts into practice the obtained functions of the effect upon the n executive elements. (n denotes the number of the discharges in the binary representation of the signal) Formulae are given for the properties of these functions. The problem of the construction of correctors on the basis of electronic or crystal elements can be reduced to the construction of a system of valves

Card 1/2

The Realization of Discrete Schemes of Correctors

SOV/20-101-62-10 50

(ventil'naya set') connected to triggers which fix the input signal. The sequence of the operations necessary for this construction is discussed. The last part of this paper deals with correctors which are constructed on the basis of hysteresis elements with rectangular loops. There are 4 figures and 8 references, 5 of which are Soviet.

ASSOCIATION: Institut avtomatiki i telemekhaniki Akademii nauk SSSR
(Institute of Automation and Telemechanics of the Academy of Sciences, USSR)

PRESENTED: July 17, 1958, by V. S. Kulebakin, Academician

SUBMITTED: July 17, 1958

Card 2/2

(S.T.M.) V.M.
PHASE I BOOK EXPLOITATION SOV/3781

Akademiya nauk SSSR. Institut avtomatiki i telemekhaniki

Promyshlennaya telemekhanika (Industrial Telemechanics) Moscow, 1960.
284 p. Errata slip inserted. 4,000 copies printed.

Resp. Ed.: M.A. Gavrilov; Ed. of Publishing House: Ye.N. Grigor'yev;
Tech. Ed.: N.G. Shevchenko.

PURPOSE: This collection of articles is intended for scientific workers and engineers in the field of telemechanics.

COVERAGE: The book contains studies completed in 1957 by the workers of the Institut avtomatiki i telemekhaniki AN SSSR (Institute of Automation and Telemechanics, Academy of Sciences USSR). They include telemechanic equipment, particularly contactless systems and systems for distributed equipment, the design of telemechanic signal systems, problems of bridge minimizing in relay circuitry, and methods of synthesizing relay circuitry using contactless components. No personalities are mentioned. Most of the articles are accompanied by references.

Card 1/ 4

Industrial Telemechanics

SOV/3781

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Industrial Telemechanics

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Abdullayev, D.A. Remote Signaling in Telemechanic Systems With Distributed Control Points 277

AVAILABLE: Library of Congress (TJ 213.A325)

Card 4/4

KM/rem/jb
7-20-60

S/103/60/021/05/00/013
B007/B011

AUTHOR: Ostianu, V. M. (Moscow)

TITLE: Circuits of Correctors of Binary Signals

PERIODICAL: Avtomatika i telemekhanika, 1960, Vol 21, No 5,
pp. 615 - 623

TEXT: One of the methods of securing the right transmission of discrete signals uses a corrector that can be connected to an arbitrary point of the transmission channel. The correctors are assumed here to be provided with diodes and relay contact elements. Among the known methods of setting up signal systems and of carrying out the correction of errors (Refs. 4, 5, 6, 7) only three are discussed here: (1) the method by M. A. Gavrilov for the correction of signals. This one is convenient as it can be used for the correction of an arbitrary number of errors; (2) the method by R. W. Hamming (Ref. 6) for the setup and correction of signals; (3) the method by R. R. Varshamov for the setup and correction of signals. By this method, the quantity of working signals N is set up in such a way that the elements of this quantity

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Card 1/3

Circuits of Correctors of Binary
Signals

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B007/B011

form an additive group with respect to the addition in coordinates according to modulus 2 (the sign "+" is understood as such). Varshamov (Refs. 4, 5) worked out a method of setting up such a quantity N with an arbitrary given code distance D . This method is briefly described here, and an example is added. R. R. Varshamov (Ref. 5) also worked out a method for the correction of errors, namely, for the case of the system of working signals having a code distance $D = 2d + 1$. The method for the correction of an individual error, i. e., for the case $D = 3$, is described and illustrated by an example. The second part of the paper deals with the synthesis of correctors. The structure of the corrector is determined for each of the above-mentioned methods of error correction. The corrector circuits are relay devices, at the inputs of which distorted or undistorted signals from the constructed system of the working signals are given. Only undistorted signals, however, occur at the output (the distorted ones are adjusted by the corrector). It is important in this connection for the number of distortions in the signals to be in agreement with the code distance.

Card 2/3

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B

Circuit of Correctors of Binary
Signals

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B007/B011

It is shown that the corrector circuits can be equalized, although the sequence of operations carried out by them differs. This statement holds for arbitrary n and d . d is the distortion, n is the signal length. The accuracy of this statement is illustrated by the example $n = 5$ and $d = 1$, namely, correctors are set up by these three methods mentioned. Formulas for the construction of circuits for correctors are derived, and the circuits themselves are constructed. There are 4 figures, 3 tables, and 9 references: 7 Soviet and 2 English.

SUBMITTED: January 8, 1959

Card 3/3



87403

The Design of Self-correcting Non-binary Codes and the Estimate of the Number of Signals in Them

8/020/60/155/006/018/057
B019/B056



$$e(a_1, a_2) = \sum_{i=1}^n f_i$$
 where $f_i = \begin{cases} 1 & \text{if } a_i \neq a_2 \\ 0 & \text{if } a_i = a_2 \end{cases}$

Basing upon results obtained in previous papers, the author attempts to find out under what conditions a certain set of signals with a minimum distance may be separated from $G_{n,b}$. The linear coding method consists essentially in finding the linearly independent elements of $G_{n,b}$ as the basis of $G_{n,b}$. With the help of definitions obtained from previous papers, the number of code signals is estimated. The author thanks Professor M. A. Gavrilov for his interest, and R. R. Varshamov for valuable advice. There are 6 references: 3 Soviet and 3 US.

Card 2/3

38737
S/194/62/000/005/031/157
D222/D309

6.9500

AUTHOR: Ostianu, V.M.

TITLE: The construction of non-binary, error-correcting codes and the estimation of the number of signals

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 5, 1962, abstract 5-2-119 G (V sb. Probl. peredachi informatsii, no. 10, M., AN SSSR, 1961, 42-48)

TEXT: Linear, non-binary, error-correcting codes are examined together with a method of construction and the estimation of the number of signals in these codes. The results obtained are a development and generalization of the work of R.R. Varshamov (Dokl. AN SSSR 1957, 117, no. 5, 739). The class of B^n sequences of the kind $a = a_1, a_2, \dots, a_n$, where each a_i takes its value from the residue classes modulo B , is an additive Abelian group $G_{n,B}$. The subgroup Δ_n produced similarly, is the set of code combinations. A number of lemmas and theorems are proved for such codes, in particular the

Card (1/2)

$$i = \overline{0, d-1}$$

$$\sum_{i=0}^{d-1} C_n^{(p-1)^i}$$

where d is the number of errors corrected and is equal to $(D-1)/2$. For the specific case of a code with a prime base, correcting a single error, $n \approx \log_2 \frac{1}{p} [1 + (n-1)(n-1)]$. 6 references. [Abstracts note: Complete translation].

VARSHAMOV, R. R. and OSTIANU, V. M.

"Application of finite fields to synthesis of reliable switching structures"

report submitted for the Intl. Symposium on Relay Systems and Finite Automata Theory (XFAC), Moscow, 24 Sep-2 Oct 1962.

MOISIL, Gr. K. [Moisil, Gr.G.], akademik; OSTIANU, V.M. (translator);
SHESTAKOV, V., red.; SAGALOVICH, Yu.L., red.; PCTAPENKOVA,
Ye.S., tekhn. red.

[Algebraic theory of discrete automatic mechanisms] Algebra-
icheskaya teoriya diskretnykh avtomaticheskikh ustroystv. Pod
red. V.I.Shestakova. Moskva, Izd-vo inostr. lit-ry, 1963.
680 p. Translated from the Rumanian. (MIRA 16:7)
(Electronic computers)
(Logic, Symbolic and mathematical)

ACCESSION NO. AT4031773

5 000/63/000/000/0226 0238

AUTHOR: Ashida, Y. M.

TITLE: Non-binary codes with asymmetric metrics

Source: Proceedings of the International Symposium on Information Theory, 1978, Cambridge, Massachusetts, USA, 1978, pp. 100-101, 100 refs.

Keywords: asymmetric metrics; asymmetric codes; asymmetric codes; nonsymmetric codes; code distance; linear codes; binary codes

ABSTRACT: The author first considers a class of non-binary codes with metrics determined by the ratio

$$q(\alpha, \beta) = \sum_{i=1}^n q(\alpha_i, \beta_i) \quad (1)$$

where α and β are code words, and

$$q(\alpha_i, \beta_i) = \begin{cases} \min \{ (\alpha_i - \beta_i), (b - \alpha_i + \beta_i) \}, & \text{if } \alpha_i > \beta_i \\ \min \{ (\beta_i - \alpha_i), (b - \beta_i + \alpha_i) \}, & \text{if } \beta_i > \alpha_i \end{cases} \quad (2)$$

Card 1/5

CONFIDENTIAL AT 40017

$$b^h > 1 + \sum_{i=1}^d \sum_{k=1}^{b_i} \sum_{l=0}^{b_i - k} (-1)^{i+k} 2^h C_{i+k-1}^{i-1}$$

in this case the solution appears as:

$$b^h > 1 + \sum_{i=1}^d \sum_{k=1}^{b_i} \sum_{l=0}^{b_i - k} (-1)^{i+k} 2^h C_{i+k-1}^{i-1} \quad (6)$$

If $b_1 = b_2 = \dots = b_k = b$, the two formulas coincide. In a further development of the subject, the code base b is assumed to be an even number, in which case any letter of the transmitted word may undergo not more than a $(\frac{b}{2} - 1)$ -multiple distortion of one type, and

not more than a $\frac{b}{2}$ multiple distortion of the other type. Then the number of verification

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symbols h in a code capable of correcting d -multiple distortions must satisfy the inequality $b^h \geq R_2 + 1$, where R_2 is the number of code words which the transmitted message may assume with all possible distortions by not more than d -multiple errors. The solution

$$b^h \geq 2n + 1, \quad (6)$$

is in agreement with the estimate of W. Ulrich (Non-binary error-correcting codes. BSTJ, V. XXXVI, no. 6, p. 1341-1389, 1957). In the concluding section of the article, the maximal value of the code distance D is determined with N , n and b given. The solution is given in the form

$$D < n \frac{N^2 b^2}{8N(N-1)} = n \frac{Nb}{4(N-1)}. \quad (7)$$

Orig. art. has: 2 figures and 8 numbered formulas.

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ADMISSION NO. AT4031773

ASSOCIATION

STATUS

EXPIRES

ENCLOSURE

CLASSIFICATION

REFERENCE NO.

OTHER

Card 5/5

ACC NR: AT6030871

SOURCE CODE: UR/0000/66/000/000/0176/0188

AUTHOR: Krishtal', V. Z.; Ostianu, V. M.

ORG: none

TITLE: Synthesis of relay systems which are insensitive to component defects and distortions of the input excitations

SOURCE: Moscow. Institut avtomatiki i telemekhaniki. Abstraktnaya i strukturnaya teoriya releynykh ustroystv (Abstract and structural theory of relay devices). Moscow, Izd-vo Nauka, 1966, 176-188

TOPIC TAGS: system reliability, statistic method, boolean algebra, boolean function, mathematic analysis

ABSTRACT: It is assumed that the relay system is insensitive to d failures of a certain type, if for r failures of the type ($0 \leq r \leq d$) the system realizes a given algorithm accurately and that there will be at least one $(d + 1)^{\text{th}}$ failure of the same type which will cause the system to realize incorrectly the same algorithm. The failure of two state system elements may be defined as $1 \rightarrow 0$, or $0 \rightarrow 1$. The failure of the system is defined as an incorrect realization of the value of the variable. It is further assumed that the distortion of the input signals and the failures of the components are independent and that failures of a given type have identical probability

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of occurrence. The failure is said to be symmetrical if the probability of $1 \rightarrow 0$ is equal to the probability of $0 \rightarrow 1$, and nonsymmetrical if the converse is true. The terms d -stable system, and (d_0, d_1) -stable system are defined as describing systems insensitive to d symmetrical failures, and those insensitive to d_0 and d_1 nonsymmetrical failures respectively ($d_0 + d_1 = d$). The following cases are considered: Synthesis of d -stable relay systems for reliable (distortion-free) input signals. Synthesis of (d_0, d_1) -stable relay systems for reliable input signals. Realization of redundant configurations in minimal disjunct normal form and minimal parenthetic form for the case of symmetrical failures. Realization of noncontact d -stable relay systems. Synthesis of d -stable relay systems with distorted input signals. Each case is analyzed and a mathematical expression defining the desired system is synthesized. Boolean functions are used. Orig. art. has: 4 figures, 7 formulas.

SUB CODE: 09,12/ SUBM DATE: 06Jun66/ ORIG REF: 007/ OTH REF: 001

Card 2/2

OSTINSKIY, A.P.

Conference on design of convection heat-transfer surfaces in boilers
fired with fuels high in sulfur. Teploenergetika 5 no.4:91-92 Apr '58.
(Boilers) (MIRA 11:5)

OSTROY 111

AUTHOR: Ostroy, A.I.

TITLE: A conference on the construction of boiler equipment. (Gov. ...
to construction inventors ...
patent ...

PERIODICAL: Teploenergetika, 1957, No. 11, p. 1-10.

ABSTRACT: A scientific-technical conference on the construction of boiler equipment was held in Moscow on October 10-11, 1957. The conference was held in the presence of representatives of the All-Union Scientific-Technical Institute of Boiler Design, the Central Boiler Design Institute, GPKK and the Institute of Boiler Design. Reports were made on the development of boiler equipment, corrosion protection, and the development of boiler equipment for surface for boilers.

Dr. A. V. Kuznetsov reports on the work of the All-Union Scientific-Technical Institute of Boiler Design. Chief Engineer of Boiler Design, I. F. Kochunov, reports on the work of the Institute of Boiler Design.

100-1238
A conference on the construction of the tail surface of aircraft
operating on sulphurous fuels.

successful experience with cast-iron elements
with enamel protection on steel tubes. The first
of Mosenergo, Engineer Polyak, also mentioned
elements. Engineer Masell' of Lashkine mentioned the
successful use of chemical additives to reduce corrosion
and wear of tubes. Engineer Pashkiri mentioned
Engineer V. V. Krasovskiy of Leningrad discussed
of end-rolling wear-resistant tubes and the
corrosion of different sorts of enamel.

I. A. Pashkiri of the All-Union Thermal Engineering
Institute mentioned the use of enamel on
the tail surface of aircraft. He mentioned
the use of enamel on the tail surface of aircraft
of the type of the "Mikoyan MiG-15".
S. I. I. Varavitskiy of the All-Union
Technical Institute mentioned the use of enamel
on the tail surface of aircraft. He mentioned
the use of enamel on the tail surface of aircraft
of the type of the "Mikoyan MiG-15".

Dr. P. S. I. Kuznetsov of the All-Union
Technical Institute, Engineer Lindyris of the
All-Union Technical Institute mentioned the use
of enamel on the tail surface of aircraft.

Card 2/2 covering the construction of the tail surface,

MALYSHEVA, Natal'ya Vladimirovna; NAUMOV, Boris Konstantinovich; OSTINSKIY, Aleksey Yakovlevich; YARTSEV, G.Ye., otv.red.; LEYBOV, M.K., red.; KARABILOVA, S.P., tekhn.red.

[Direct system of automatization and operation of long-distance telephone communications] Nemedlennaya sistema ekspluatatsii i avtomatizatsiya mezhdugorodnoi telefonnoi svyazi. Moskva, Gos. izd-vo lit-ry po voprosam svyazi i radio, 1958. 53 p.

(MIRA 12:3)

1. Zamestitel' nachal'nika Tsentral'noy mezhdugorodnoy telefonnoy stantsii (for Malysheva). 2. Glavnyy inzhener Rizhskoy mezhdugorodnoy telefonnoy stantsii (for Naumov). 3. Glavnyy inzhener Leningradskoy mezhdugorodnoy telefonnoy stantsii (for Ostinskiy).
(Telephone)

OSTISTY, B.K.

Distinguishing zones of the increased tectonic jointing of rocks.
Geol. i geofiz. no.2:146-149 '65. (MIRA 1839)

1. Sakhalinskoye otdeleniye Vsesoyuznogo neftyanogo nauchno-issledovatel'skogo geologorazvedochnogo instituta, g. Okha-na-Sakhaline.

OSTISTYY, B.K.

Some regularities in the alteration of reservoir properties of rocks in the main oil-bearing formation in northeastern Sakhalin (Okobykay series). Geol. nefti. i gaza 9 no.7: 30-33 Je '65. (MIRA 18:15)

1. Sibirskoye otdeleniye Voennoyuznogo neftyanogo mashinostroyeniynskogo geologorazvedochnogo instituta.

LI DA-YEN; OSTINSKIY, G.M.; SODNOM, N.; GOVOROV, A.M.; SIZOV, I.V.;
SALATSKIY, V.I.

Investigation of the $He^3 + H^3$ reaction. Zhur. eksp. i teor. fiz.
39 no.2:215-229 Ag '60. (MDA 13:9)

1. Ob"yedinennyy institut yadernykh issledovaniy.
(Nuclear reactions)

OSTISTYY, B.K.

Bituminosity of Lower and Middle Miocene sediments in the Nevel'sk region of southern Sakhalin. Trudy VNIGRI no.224:53-58 '63.

Possible types of reservoir rocks in the Miocene sediments of the Kril'on tectonic zone in southern Sakhalin. Ibid.:76-80 (MIRA 17:2)

BELOKON', M.Ye.; INOZEMTSEV, G.B.; KOZYRINA, A.P.; VOZNYUK, V.S.;
OSTIYAN, Z.Yu.; KOZUB, M.M.; MAN'KO, Ya.V.

Electric apparatus for chair varnishing. Der. prom. 12 no.9;
11-12 S '63. (MIRA 16:10)

1. Ukrainskiy nauchno-issledovatel'skiy institut mekhanicheskoy obrabotki drevesiny (for Belokon', Inozemtsev, Kozyrina, Voznyuk).
2. Irshavskiy mebel'nyy kombinat (for Ostiyan, Kozub, Man'ko).