

Hydrological Basis of a Uniform Power Supply System

SOV/ 50-58-7-8/20

years is taken into account, no considerable changes of the characteristics of the relative quantities of the water discharge result. There are 3 references, all of which are Soviet.

1. Power plants
2. Inland waterways--Performance
3. Inland waterways--Climatic factors
4. Hydrology--Analysis

Card 3/3

SOMOV, N.V.

Asynchrony of fluctuations in the discharge of large rivers of
the U.S.S.R. Meteor. i gidrol. no.5:14-21 My '63. (MIRA 16:5)

1. Tsentral'nyy institut prognozov.
(Runoff)

SOMOV, N.V.

Asynchronism and cyclicity in variations in the discharge of large
rivers in the U.S.S.R. Trudy TSIP no.117:180-214 '63. (MIRA 16:7)
(Runoff)

1950, I. V. M. K.

"Variability in Tularemia Bacteria", Zhur Mikrobiol, Epidemiol i Immunobiol
No. 2, pp 47-52, 1950.

SOMOV, S.O. (Moskva)

"Prevention of premature aging" by F.M.Kolomitsev. Reviewed by
S.O.Somov. Priroda 49 no.9:120 S '60. (MIRA 13:10)
(Aging) (Kolomitsev, F.M.)

L 52966-65 EWT(m) Feb DIAAP

ACCESSION NR: AP5010520

UR/0056/65/048/004/1199/1199

AUTHOR: Bobrov, V. D.; Varlanov, V. G.; Grashin, Yu. M.; Dolgoshein, B. A.; Kirillov-Ugryumov, V. G.; Roganov, V. S.; Samoylov, A. V.; Somov, S. V.

21
20
B

TITLE: Capture of negative muons by pure chromium and nickel isotopes

19

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 48, no. 4, 1965, 1199-1199

TOPIC TAGS: muon, chromium, nickel, muon capture, proton subshell, neutron subshell, muon lifetime, capture rate

ABSTRACT: The authors point out that data on muon capture by nuclei can be used as a tool for the study of the structure of the nucleus, and have therefore investigated muon capture by nuclei with closed neutron or proton subshells, in the form of isotopes of Cr with mass numbers 50, 52, 53, and 54 (Cr⁵² has a closed neutron subshell) and Ni isotopes with mass numbers 58, 60, and 62 (which have a closed proton subshell). The isotope enrichment runs from 78.5 to 99.5%. The muon beam from the OIYeI (Joint Institute of Nuclear Research) synchrocyclotron was used for the experiments. The total muon capture probability was determined by measuring

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ACCESSION NR: AP5010520

the lifetimes of the muons on the K orbit of the corresponding atom. The experimental results by processing the corresponding time distributions with a computer are:

Nucleus:	Cr ⁵⁴	Cr ⁵⁶	Cr ⁵⁸	Cr ⁶⁰	Ni ⁵⁸	Ni ⁶⁰	Ni ⁶²
Capture rate 10 ⁵ sec	38.25± ±0.50	34.52± ±0.47	32.97± ±0.45	30.57± ±0.42	61.10± ±1.05	55.62± ±0.97	47.10± ±0.95

A detailed discussion of the results and of the measurement procedure will be published later. Orig. art. has: 1 table.

ASSOCIATION: Moskovskiy inzhenerno-fizicheskiy institut (Moscow Engineering Physics Institute)

SUBMITTED: 26Dec64

ENCL: 00

SUB CODE: NP

NR REF SOV: 000

OTHER: 000

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is violated only in five of 31 cases. Four out of the five violations are in compounds of carbon, and this is apparently connected with very complicated spatial configuration of these molecules. The measurement procedure and a detailed discussion of the results will be published later. Orig. art. has: 3 tables.

ASSOCIATION: Moskovskiy inzhenerno-fizicheskiy institut (Moscow Engineering Physics Institute)

SUBMITTED: 26Dec64

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NR REF SOV: 001

OTHER: 008

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L 14574-66 ENT(m), 1 DJ
ACC NR: AP6005336

SOURCE CODE: UR/0413/66/000/001/0074/0074

INVENTOR: Papok, K. K.; Kreyn, S. E.; Vipper, A. B.; Zuseva, B. S.; Garzanov, G. Ye.;
Vinner, G. G.; Lobkin, I. Ye.; Afanas'yev, I. D.; Rogachevskaya, T. A.; Somov, V. A.;
Botkin, P. P.; Kuliyeu, A. H.; Zeynalova, G. A.

ORG: none

TITLE: Preparation of motor oil. Class 23, No. 177579

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 1, 1966, 74

TOPIC TAGS: motor oil, antiwear additive, detergent additive

ABSTRACT: An Author Certificate has been issued for a preparative method for motor oil, involving addition of a detergent and an antiwear additive to the oil base. The method provides for the use of an alkyl-formaldehyde condensation product and of a dialkyl dithiophosphate based on C₁₂-C₁₆ alcohols as the additives. [BO]

SUB CODE: 11/ SUBM DATE: 16Apr64/ ATD PRESS: 9/90

Cord FW 11

UDC: 621.892.8

BOTKIN, P.P., inzh.; SOMOV, V.A., kand.tekhn.nauk

Using additives in heavy fuels of marine diesel engines.
Sudostroenie 24 no.5:66-67 My '58.
(Diesel fuels) (Marine diesel engines)

(MIRA 11:6)

BOTKIN, Petr Petrovich; SOMOV, Vitaliy Aleksandrovich; PLATONOV, R.K.,
nauchnyy red.; SHAURAK, Ye.M., red.; SHISHKOVA, L.M., tekhn.red.

[Utilization of heavy oils in marine diesel engines] Primenenie
tiazhelykh topliv v sudovykh dizeliakh. Leningrad, Gos.soiuznoe
izd-vo sudostr.promyshl., 1959. 148 p. (MIRA 12:10)
(Marine diesel engines--Fuel)

SOMOV, V.A.; KRYLOV, Ye.I.

Cylinder oils for slow-run high-powered diesels. Khim.i tekhn. topl.
i masei 6 no.1:54-57 Ja '61. (MIRA 14:1)

1. Tsentral'nyy nauchno-issledovatel'skiy dizel'nyy institut.
(Diesel fuels)

SOMOV, V.A., kand.tekhn.nauk, dotsent

Diesel lubricants used abroad. Energomashinostroenie 7 no.7:47-
48 J1 '61. (MIRA 14:8)

(Diesel engines)
(Lubrication and lubricants)

SOMOV, V.A., kand.tekhn.nauk

Performance of diesel engines on sulfur-containing fuel with
additives. Vest.mash. 41 no.3:15-16 Mr '61. (MIRA 14:3)
(Diesel fuels)

KHANDOV, Zosima Aleksandrovich; GITIS, V.Yu., prof., retsenzent;
SOMOV, V.A., red.; VOLCHOK, K.M., tekhn. red.

[Marine internal combustion engines; theory] Sudovye dvigateli
vnutrennego sgoraniia (teoriia). Leningrad, Izd-vo "Rechnoi
transport," 1962. 452 p. (MIRA 15:12)
(Marine engines)

SOMOV, V.A., kand. tekhn. nauk, dotsent; NIKIFOROV, O.A., inzh.

Increase in the efficiency of diesel engines by raising the quality of
the oil with admixtures. Energomashinostroenie 11 no.6:35-36 Je '65.
(MIRA 18:7)

112-3-6310

Translation from: Referativnyy Zhurnal, Elektrotehnika, 1957,
Nr 3, p. 177 (USSR)

AUTHOR: Bamdas, A. M., Somov, V. A.

TITLE: Voltage Regulator with Magnetic Field Regulation in
Autotransformers (Stabilizator Napryazheniya s podmag-
nichivayemym avtotransformatorom)

PERIODICAL: Tr. Gor'kovsk. politekhn. in-ta, 1956, Vol. 12, Nr 1,
pp. 72-76

ABSTRACT: A voltage regulator developed by Professor Bamdas and
Engineer Somov is described. It has high efficiency and
power factor (under a resistive load of about 0.95).
The principle of operation is briefly described. The
basic component is a specially-designed power auto-
transformer, in which the secondary voltage is regulated
by a changing magnetic field. By automatic regulation
of the magnetizing current, it is possible to obtain
stable secondary voltage with a variation of $\pm 15\%$ in
the supply circuit voltage. A plot of output voltage
versus network voltage variations and a complete diagram

Card 1/2

SOMOV, V. A. Cand Tech Sci -- (diss) "Transformers controlled by magnetized shunts.
(Elements of theory and experimental studies)." Gor'kiy, 1957. 11 pp ^{with diagrams} 21 cm.
(Min of Higher Education USSR. Gor'kiy Polytechnic Inst im A. A. Zhdanov. Chair
of Electrical Machines), 100 copies (KL, 14-57, 87)

SOMOV, V.A.; KUZ'MENKOV, O.P.; SOLDADOV, V.K.; ZINCHENKO, V.I., spets. red.;
KOTLYAKOVA, O.I., tekhn. red.

[Electric indicators and their use in testing marine internal
combustion engines] Elektricheskie indikatory i ikh primeneniye
pri ispytaniyakh sudovykh DVS. Leningrad, Izd-vo "Morskoi transport,"
1958. 217 p. (MIRA 11:7)

(Marine engines--Testing)

SOV/144-58-9-3/18

AUTHORS: Bandas, A. M., Doctor of Technical Sciences, Professor,
Head of the Chair of General and Theoretical Electrical
Engineering and of Electrical Machinery and Apparatus,
Somov, V. A., Candidate of Technical Sciences,
Lecturer, and Suchkov, V. A., Assistant of the Chair of
Electrical Machinery

TITLE: Welding Transformer with Continuous Voltage Regulation
by means of Premagnetizing a Shunt (Svarochnyy
transformator s plavnym regulirovaniyem napryazheniya
pri pomoshchi podmagnichivaniya shunta)

PERIODICAL: Izvestiya Vysshikh Uchebnykh Zavedeniy, Elektromekhanika,
1958, Nr 9, pp 61-65 (USSR)

ABSTRACT: In the research laboratory of the Chair of Electrical
Machinery of the Gorkiy Polytechnical Institute a new
system of transformers was developed in which
continuous regulation of the secondary voltage can be
achieved (Ref 3). The regulation is effected by
premagnetizing of a shunt of the transformer core.
This method can be applied also for welding transformers.
According to Solov'yev (Ref 4) operating experience
with an experimental transformer embodying such

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Welding Transformer with Continuous Voltage Regulation by means
of Premagnetizing a Shunt

continuous voltage regulation in an automatic butt welding machine yielded favourable results. In this paper the principle of operation and the design of such a transformer for electric contact welding is described. A sketch of the produced welding transformer is reproduced in Fig 1. The copper and steel consumption for producing such transformers is somewhat higher than for transformers with step-wise voltage regulation. The experimental specimen of such a transformer for contact welding has a rating of 3 kVA, a maximum welding current of 4000 A and for a constant load the ratio of the regulation limits of the welding current is 1:2.3, the secondary voltage during welding is 0.96 to 1.62 V, the weight 74 kg. The winding data of the transformer are entered in Table 1, p 65. The authors believe that transformers of this type will prove useful as welding transformers.

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SOV/144-58-10-11/17

AUTHORS: Bandas, A.M., Doctor of Technical Sciences, Professor;
Somov, V.A., Candidate of Technical Sciences, Lecturer and
~~Shmidt, A.O.~~, Assistant

TITLE: Some Variants of Construction of Single-Phase and
Three-Phase Transformers Controlled by Submagnetisation
of Shunts (Nekotoryye varianty konstruktsey odnofaznykh
i trekhfaznykh transformatorov, reguliruyemykh
podmagnichivaniyem shuntov)

PERIODICAL: Izvestiya Vysshikh Uchebnykh Zavedeniy, Elektromekhanika,
1958, Nr 10, pp 115-123 (USSR)

ABSTRACT: Many articles on single-phase transformers controlled
by the submagnetisation of shunts suggest including
the magnetic shunts in the secondary winding window as
shown in Fig 1a and b. With this construction the
secondary winding is linked with the main flux of the
primary winding and the opposing flux of the shunt.
Regulation is effected by altering the submagnetisation
flux. With this arrangement the magnetic system is
complicated and the primary is located inside the
secondary, which is inconvenient when designing dry
high-voltage step-down transformers. Therefore,

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Some Variants of Construction of Single-Phase and Three-Phase Transformers Controlled by Submagnetisation of Shunts

constructions have been developed in which the shunts are located in the window of the primary winding. In this case the secondary winding is linked by the resultant flux of the primary winding and the shunt. Single-phase transformers with submagnetisation shunts in the primary winding window are then considered in more detail. In all the constructions described the primary windings are outside the secondary. The construction of the transformers illustrated in Fig 2 differs from those shown in Fig 1 in that the main legs of the core carry the secondary winding instead of the primary and the external primary winding encloses the main leg and the magnetic shunt with submagnetisation winding. A number of constructions are then described in which the main and supplementary magnetic systems are separate so that the transformers have cores of normal type. The simplest form of this construction is illustrated in Fig 3 and it will be seen that two cores, one carrying the secondary winding and the other the

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submagnetisation winding are placed side by side and the primary winding is wound round the two together. Two identical transformers of this construction are needed for connection to a single phase supply, their primary and secondary windings are connected in series or in parallel and the submagnetisation windings are connected back-to-back to suppress the alternating emf's induced in them. In some cases additional steps have to be taken to compensate the alternating emf in the auxiliary winding. The degree of voltage control that can be achieved with such transformers depends on a number of factors. Curves of the secondary voltage as a function of the submagnetisation current are given in Fig 4 for several values of load resistance on an experimental model of the transformer. The transformer was intended for wide range of voltage control on load and has an additional submagnetisation winding on the main core. The construction of the transformer, which is illustrated in Fig 3 is most simple and convenient for use with wound toroidal cores. A transformer with

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one main core and two submagnetisation cores is illustrated in Fig 5. The submagnetisation windings on the two cores are cross-connected so that only one transformer is required instead of two. Fig 6 illustrates a variant of the construction described in Fig 5 in which the main magnetic circuit and the two submagnetisation cores are all arranged in a single plane. A transformer with the main magnetic system of the core type and an auxiliary magnetic system with four legs is shown in Fig 7. The submagnetisation windings are cross connected in pairs and the legs of the auxiliary magnetic system are longer than that of the main system so that the submagnetisation windings can be increased in length and reduced in diameter. A transformer designed for wide range of control secondary voltage at no-load and variable load is illustrated in Fig 8. Both main and auxiliary cores have three legs. The submagnetisation winding is wound on the middle leg of its core and hardly any power frequency emf is induced in it. The choice of

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transformer construction must be decided in each individual case separately. Three-phase transformers controlled by submagnetisation of shunts are then considered. Such three-phase transformers may consist of combinations of two or three single-phase transformers with sub-magnetised shunts or specially constructed three-phase transformers. All the constructions of single-phase transformers that have been described may be used for three-phase groups. The submagnetisation circuits of the individual single-phase transformers can be fed from a common d.c. supply. Special three-phase transformers are more compact than single-phase groups and their construction is analogous with that of single-phase transformers. Three-phase transformers with magnetic shunts in the windows of the secondary windings are first considered. The simplest construction of three-phase transformer of this type is illustrated in Fig 9. In effect the magnetic system of the transformer consists of three separate cores each with three legs with a common yoke. With this construction

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a shell-type magnetic system may be used for each phase. A disadvantage of the construction is that there is cross submagnetisation of small sections of the main magnetic circuit by constant current of the shunt which somewhat increases the reactive component of the primary winding current. In the construction illustrated in Fig 10, the main magnetic circuit is a standard three leg magnetic system. Each phase of the primary winding is wound on one leg of this core and all three phases have independent magnetic shunts. The secondary windings are wound round the main legs and the legs of the magnetic shunts. With this construction the main flux is separated from the submagnetisation flux. A disadvantage is that the system is rather difficult to assemble. A design due to Engineer B.N.Solov'ev of the Gor'kiy Council of National Economy for a three-phase transformer with a magnetic system having nine cores arranged in a single plane is shown in Fig 11. Three-phase transformers with separate magnetic shunts in the

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primary winding window are then considered. A possible construction is illustrated in Fig 12, the secondary winding is wound on three legs of an ordinary three-phase core, the submagnetisation winding is wound on the inner legs of a five leg auxiliary core. Better compensation of the emf's of the fundamental and higher harmonics in the sub-magnetisation circuit is given by the three-phase construction illustrated in Fig 13, in which the submagnetisation winding is arranged on two magnetic shunts which are on two five-leg cores. A fairly simple construction is illustrated in Fig 14, in which the secondary winding is wound on an ordinary three-phase magnetic system, perpendicular to which are three single-phase two-leg cores which carry the submagnetisation windings. A further variant of this construction is illustrated in Fig 14, in which there are three pairs of single-phase cores for the shunts on

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Some Variants of Construction of Single-Phase and Three-Phase Transformers Controlled by Submagnetisation of Shunts

which the windings are cross-connected in pairs.
There are 15 figures and 5 Soviet references.

ASSOCIATION: Kafedra Obshchey i Teoreticheskoy Elektrotehniki i Elektricheskikh Mashin i Apparatov Gor'kovskogo Politeknicheskogo Instituta (Chair of General and Theoretical Electrical Engineering, Gor'kiy Polytechnical Institute)

SUBMITTED: 29th September 1958

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SOMOV, V. A.

8(3)

PHASE I BOOK EXPLOITATION

SOV/2467

Pravdas. Aleksandr Markovich, Vladimir Aleksandrovich Somov and Aleksey
Osipovich Shmidt

Transformatory i stabilizatory, reguliruyemye podmagnichivaniyem shuntov
(Transformers and Stabilizers Controlled by Magnetizing Shunts) Moscow,
Gosenergoizdat, 1959. 135 p. 12,000 copies printed.

Ed.: M. A. Boyarchenkov; Tech. Ed.: G. Ye. Larionov

PURPOSE: This booklet is intended for staff members of scientific research
institutes, laboratories and design offices engaged in the development of
transformers and stabilizers. It may also be useful to students of
electrical engineering departments of vuzes.

COVERAGE: The authors discuss new transformers and voltage stabilizers
regulated under load by means of magnetizing shunts. They explain the
theory of operation and methods of design. They also present design
examples and discuss automatic control circuits of stabilized transformers
and autotransformers. The material is based largely on the authors' original
work in the design of transformers regulated by means of magnetizing shunts.

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Transformers and Stabilizers (Cont.)

SOI/2467

No personalities are mentioned. There are 67 references; 66 Soviet (including 9 translations) and 1 German.

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AUTHORS: Bamdas, A.M. (Dr.Tech.Sci.), Somov, V.A. (Cand.Tech.Sci.)
and Shapiro, S.V. (Engineer)

TITLE: New High-output a.c. Starting Stabilisers

PERIODICAL: Vestnik elektropromyshlennosti, 1959, Nr 9, pp 8-12 (USSR)

ABSTRACT: The Research Laboratory of the Electrical Machines
Chair of the Gor'kiy Polytechnic Institute has made
prototypes of a.c. starting stabilisers with outputs of
2.5 and 10 kW. These starting stabilisers are intended
for use in conjunction with the filaments of large radio
valves which are of much lower resistance when cold than
when hot. The device consists of a transformer
controlled by a pre-magnetised shunt. The arrangement
of the core and coils of this transformer is illustrated
diagrammatically in Fig 1. The primary winding is wound
on the two main inner limbs, the d.c. control winding
being on the narrow outer magnetic shunt limbs whilst
the secondary winding is wound round both main and shunt
limbs. The hot resistance of valve filaments is nine
times greater than the cold resistance, so that the
secondary is practically short-circuited on starting and
the current in it is controlled by automatic regulation

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New High-output a.c. Starting Stabilisers

of the d.c. pre-magnetisation of the shunt limbs. A full schematic diagram of a 10-kW starting stabiliser is shown in Fig 2; it consists of the transformer already described, with suitable control arrangements. The latter comprise a measuring device, an electronic amplifier, a magnetic amplifier and a starting device. These are described in turn and their functions briefly explained. It is possible for starters of this kind to oscillate, so stability is considered and formula (3) is derived for the conditions of stability of the system. The design points that must be watched to ensure stability are briefly mentioned. Test results and characteristics of the arrangement are then given; the performance curves of Fig 3 relate to a 10-kW device. It will be seen that the secondary voltage differs from the rated value by only $\pm 0.5\%$ when the primary voltage alters by $\pm 10\%$. The efficiency of the device is 39% and the power factor about 0.7. Starting characteristics of the 10-kW stabiliser are given in Fig 4 and indicate that during the starting period the secondary current does not exceed the permitted value of 750 amps. The tests also confirmed that the temperature rise of the equipment was

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New High-output a.c. Starting Stabilisers

not excessive. Dimensions and weights are stated and a photograph of the 10-kW stabiliser is given in Fig 5. There are 5 figures, and 4 Soviet references.

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AUTHOR Sokolov, V. I., Institute of Technical Sciences

TITLE Voltage regulator with biased booster transformers

PERIODICAL Elektricheskoe, no. 5, 1960, 54-56

Summary: Some data on voltage regulators with biased booster transformers are given here. Fig. 1 shows the regulator circuit reported by R. F. Ilievich, USSR, in 1959, and Fig. 2 the circuit of a regulator widely used at present (USSR, in an 11,000-watt class 50 (17), no. 204, 1959, 1-50). The greater number of auxiliary transformers (4 instead of 2) in the first shortcoming of this regulator. Fig. 3 shows a regulator circuit where the two booster transformers with the five-rod core are comprised in one unit. In the extreme positions, only one of the transformers T_6 or T_8 is entirely biased. All cores in all cases saturated. Compared with the circuit in Fig. 2, the more compact design and lower material consumption are the advantages of this circuit. Fig. 4 shows the design of a regulator where the magnetic conductors of the main alternating magnetic field are

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9/10/86, No. 7, 1976, p. 116
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perpendicular to the central rod (by which the constant flux circuit is closed). The regulator shown in Fig. 1 is used in the design of the USSR Polytechnic Institute. The case is not investigated, where the main voltage U_1 to be regulated (Fig. 1) is the mains voltage, and the transformer is not used. The equivalent-circuit diagram is developed for two boundary cases when only one of the booster transformers is entirely biased. Under certain conditions it is assumed that in the completely biased booster transformer the coupling coefficient (between the windings) drops so strongly that the value of the control induction can be neglected. In such a case the regulator can be considered as a transformer. The value of the control induction is neglected in the equivalent-circuit diagram for such a transformer was described by S. S. Bandas, V. I. Kostin, and G. Shabat (Ref. 4, "Laboratory 1 stabilizatsiya i ustoychivyye podmagichivaniya chunitey, Moscow, 1959"). This model is applied to the regulator in question at a rated magnetic circuit of the transformer T_1 , the equivalent-circuit diagram

shown in Fig. 5. In this diagram U_1 is the mains voltage reduced to the secondary winding of T_1 ; I_{1n} is the current of the transformer in the case reduced to the secondary winding of T_1 ; Z_{1n} is the resistance of the

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B116/B206

Voltage regulator with biased . . .

primary winding of T_{δ} reduced to the secondary winding of T_{α} with complete magnetic biasing of its core; x'_{1s} and r'_1 is the leakage resistance and the effective resistance, respectively, of the primary winding of T_{δ} , reduced to its secondary winding; Z'_{01} is the resistance of the magnetizing circuit of T_{δ} , reduced to the secondary winding T_{δ} ; x_{2s} and r_2 is the leakage- and effective resistance, respectively, of the secondary winding of T_{δ} ; Z_{2d} is the resistance of the secondary winding of T_{α} with maximum magnetic biasing.

f

If T_{δ} is biased, the build-up is similar, only the voltage shows a direction opposed to the phase of \dot{U}_1 (dashed line). The equivalent-circuit diagram permits determining the limits of the regulation of the secondary voltage, for an arbitrary load resistance, as well as the necessary mains current and power factor of the regulator for the two boundary cases (with complete magnetic biasing of one transformer). For this purpose, the currents and secondary voltages are determined from the circuit (Fig. 5), for a given load resistance, that is 1) if \dot{U}_1 and \dot{U}'_1 coincide according to the phase,

Card 3/ ~~10~~ 5

33032 E

S/105/60/000/009/005/009/XX
B116/B206

Voltage regulator with biased

and 2) at a phase shift of one voltage against the other by 180° . I_1 (Fig. 4) equals the sum of I_2 and $I_{1\mu}$. In order to determine $I_{1\mu}$, the current $I_{1\mu}$ obtained (in the usual way) from the calculation, is reduced to the primary winding of the T_0 (in the present case), and geometrically added to I_2 .

The power factor is determined from the angle between \dot{U}_1 and \dot{I}_1 . The parameters x_s , r , and Z_{01} of the non-biased transformer are calculated by means of the calculation methods for ordinary transformers. The method presented in Ref. 4 for determining the parameters of the magnetic biasing windings of a transformer with biased shunt, can be applied to the present case. A test transformer was built according to the circuit of Fig. 4. It serves as a switching member of a voltage stabilizer. The transformer steel weighs 11 kg, the copper 7.65 kg. The stabilizer output amounts to 1650 va. The mains voltage variation amounts to $\pm 12.5\%$. The power factor varies during regulating between 0.93 and 0.99. The characteristics of the stabilizer are shown in Fig. 6. The stabilized voltage is practically sinusoidal over the total stabilizing range. There are 6 figures and 5 Soviet-bloc references.

Card 4/105

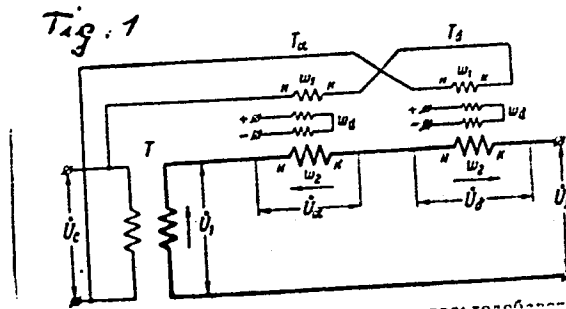
33032 R
S/105/60/000/009/005/000/...
3116/3206

... stage regulator with biased ...

ASSOCIATION: Odesskiy politekhnicheskii institut (Odessa Polytechnic Institute)

DATE SUBMITTED: March 29, 1960

Fig. 1: Voltage regulation by means of magnetic biased booster transformers.



Card 5/5

S/103/60/021/06/15/016
B012/B054

AUTHORS: Bandas, A. M., Kulinich, V. A., Somov, V. A.,
Suchkov, V. A., Shapiro, S. V., Shmidt, A. O.,
Gu Shen-gu (Gor'kiy)

TITLE: New Electromagnetic Control Organs for Automatic Control
Systems

PERIODICAL: Avtomatika i telemekhanika, 1960, Vol. 21, No. 6,
pp. 907 - 917

TEXT: New transformers were designed at the Gor'kovskiy politekhnicheskoy institut im. A. A. Zhdanova (Gor'kiy Polytechnic Institute im. A. A. Zhdanov) for the construction of control organs for automatic control systems without switching contacts, mobile parts, or electronic elements (Ref., Footnote on p. 907). They are controlled by changing the premagnetization of shunts located in the secondary windings (Fig. 1). Such control organs of a capacity of 0.1 ÷ 150 kva are used in a number of plants in the USSR. A single-phase transformer of this type of 5600 kva is being developed at present. The various systems of such transformers are de-

Card 1/3

B

New Electromagnetic Control Organs for
Automatic Control Systems

S/103/60/021/06/15/016
B012/B054

scribed here. The data refer to investigations carried out in 1959 but not yet published. The paper of Ref. 2 reported on previous investigations. First, the authors describe two principal constructions of single-phase transformers of this type: one for controllers with effective control, the other for control elements of various stabilizers. These constructions are shown in Figs. 2 and 3, respectively. Some of their parameters are characterized. Fig. 4 shows the circuit diagram of an automatic control of an electric drive with voltage stabilization and abrupt cutoff. As second group of these new transformers, single-phase transformers with feedback are described. The use of an external feedback (Fig. 5) reduces the intensity of the control signal without reducing the weight of the transformer. An internal feedback, however, leads to a relative reduction of the copper weight of the transformer by about 15 %. The parameters of a 1.33-kva transformer are indicated. The authors give a mathematical analysis of the operation of a transformer of the new type. It is shown that such an ideal transformer, like an ideal magnetic amplifier, is an aperiodic member of the first order with a time constant according to formula (6). Next, the authors describe their group transformer with three single-phase transformers of the type mentioned (Fig. 8). It is used for

Card 2/3

B

SOMOV, Vladimir Aleksandrovich, kand.tekhn.nauk, dotsent; SHUT', Vsevolod Vasil'yevich; BOBRIKOV, Sergey Aleksandrovich, assistant

Possible operation of a saturable reactor without distortion of the shape of the curve of the regulated current. Izv. vys. uch. zav.; elektromekh. 5 no.8:860-865 '62. (MIRA 15:8)

1. Odesskiy politekhnicheskii institut (for Somov).
2. Glavnyy inzhener "Odessaenergo" Odesskogo sovnarkhoza (for Shut').
3. Kafedra avtomatiki i telemekhaniki Odesskogo politekhnicheskogo instituta (for Bobrikov). (Magnetic amplifiers)

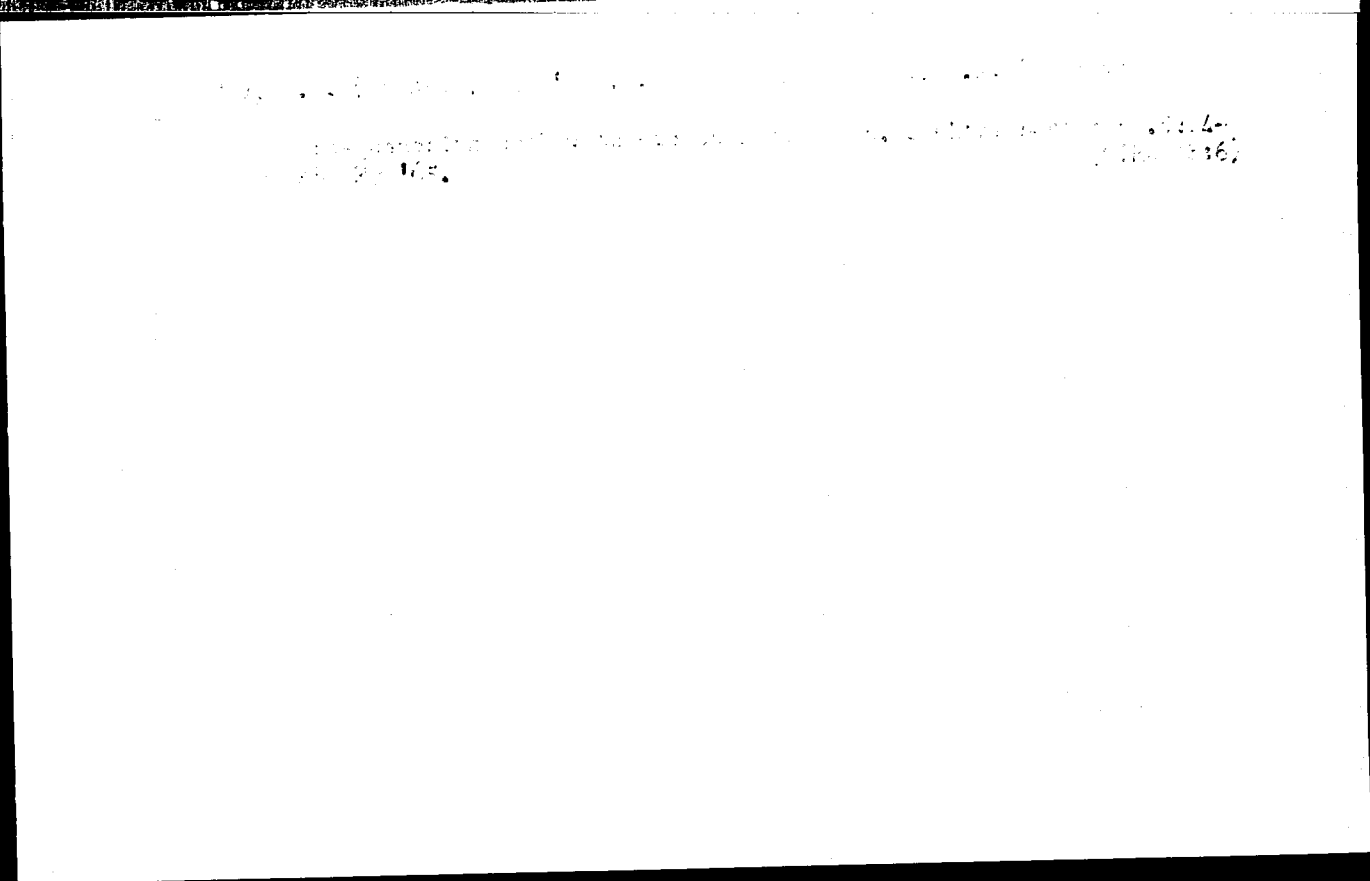
SGNOV, V.A.; KRYLOV, Ye.I.

Use of the OMII-1 all-purpose indicator for measuring the wear
of mechanical parts. Zav.lab. 28 no.6:744 '62. (MIRA 15:5)
(Testing machines)

BOBRIKOV, Sergey Aleksandrovich, assistant; SOMOV, Vladimir
Aleksandrovich, kand. tekhn. nauk, dotsent

Method for manufacturing the magnetic circuit of a coil with
a steel core having a given dependence between magnetizing
current and flux. Izv. vys. ucheb. zav.; elektromekh. 6
no.12:1332-1337 '63. (MIRA 17:1)

1. Kafedra avtomatiki i telemekhaniki Odesskogo politekhni-
cheskogo instituta (for Bobrikov). 2. Odesskiy politekhni-
cheskiy institut (for Somov).



L 45678 66 EWT(m)/T DJ/WE

SOURCE CODE: UR/0318/66/000/004/0021/0024

ACC NR: AP6023624

AUTHOR: Botkin, P. P.; Vipper, A. B.; Zuseva, B. S.; Kreyn, S. E.; Papok, K. K.; Somov, V. A.

52
B

ORG: none

TITLE: New composition of diesel oil additives

SOURCE: Neftopererabotka i neftekhimiya, no. 4, 1966, 21-24

TOPIC TAGS: diesel oil, antioxidant additive, lubricant additive

ABSTRACT: A composition of additives to motor fuels was developed in order to match imported additives in their effectiveness when taken in similar concentrations. The composition includes the additives BFK (4%) and LANI-317 (0.25%). The BFK additive is the barium salt of the products of condensation of alkylphenol with formaldehyde, and the LANI-317 additive is zinc dialkyldithiophosphate in isopropyl alcohol and C12-C16 alcohols. In wetting and antioxidation properties, the new composition is practically equivalent to foreign additives (those of the Monsanto Co.) designed for oils of the first series of the international classification. The new composition also has advantages over antiwear and wetting agents in the operation of a diesel motor on low-sulfur fuel. The use of the new composition of additives increases the motor potential of fast diesel engines and reduces their oil consumption. Orig. art.

Card 1/2

UDC: 665.4:66.022.3:621.892

L 15678-66

ACC NR: AP6023624

has: 3 tables.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 007/ OTH REF: 001

Card 2/2 fv

DAVYDOV, P. I., SOMOV, V. A.

Useful book. Khim. i tekhn. topl. i masel 9 no.9:71-72 S '64.
(MIRA 17:10)

SOV/11-59-8-8/17

3(2)

AUTHORS: Dmitriyeva, R.G., Somov, V.D. and Bogdanovich, A.K.

TITLE: The Alkun Horizon and its Stratigraphic Importance

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya geologicheskaya, 1959, Nr 8, pp 87 - 99 (USSR)

ABSTRACT: The authors propose the unification of numerous local stratigraphic schemes of sub-division of the Maykop series (Oligocene - Miocene Epochs) of Eastern Ciscaucasia into suites and horizons, taking as a basis for this unification the Alkun horizon, which was identified by the authors in different regions of the Vostochnoe Predkavkaz'ye (Eastern Ciscaucasia), between the rivers Sulak in the east and Belaya in the west. The authors give the characteristic features of the Alkun horizon and its correlation with over- and underlying beds in each of the 7 regions studied. Tectonic structures of the Maykop series in question have been studied at different time

Card 1/3

SOV/11-59-8-8/17

The Alkun Horizon and its Stratigraphic Importance

A.A. Khutsiyev, V.N. Golozubov and S.T. Korotkov, who, in sub-dividing the Maykop series into suites and horizons, gave them different designations. The authors studied 7 different core-samples identifying the Alkun horizon in each of them. An analysis of these core-samples showed that the Alkun horizon is composed of clays of various colors with carbonaceous inclusions differing in structure and composition. The most important feature of the horizon is the presence of a resistant lithological complex called by the authors an argillaceous-dolomitic platy bed with Cystoseiras. This bed, composed of one or two seams of platy dolomites with enclosing clays, contains (in most of the core samples) the imprints of weeds of the Cystoseira species, characteristic of the Alkun horizon and identified by E.N. Kara-Murza. It also contains remains of the foraminifera Uvigerinella aff. Californica Cushman, Bolivina ex gr. Floridana Cushman and Nonion aff. martcobi Bogd. The authors think that the Alkun horizon can be used as a correlative

Card 2/3

The Alkun Horizon and its Stratigraphic Importance SOV/11-59-8-8/17

for the geological mapping and as a basis for the elaboration of a unified stratigraphic plan of the Maykop series. There are 2 photographs, 1 set of diagrams, and 7 Soviet references.

ASSOCIATION: Groznenskiy neftyanoy n.-i. institut (The Grozny Oil Scientific Research Institute)

SUBMITTED: July 9, 1958

Card 3/3

SOMOV, V.D.

Prospects for finding oil and gas in Paleogene sediments of
eastern Ciscaucasia. Trudy Geol. NII no.8:56-63 '60.
(MIRA 13:8)

(Caucasus, Northern--Petroleum geology)
(Caucasus, Northern--Gas, Natural--Geology)

SOMOV, V.D.

Interruptions in deposition and intraformational disturbances
in the Paleogene in eastern Ciscaucasia. Trudy Gos. NII no.8:64-
70 '60. (MIRA 13:8)
(Caucasus, Northern--Sedimentation and deposition)

SOMOV, V.D.

Geotectonic activity in eastern Ciscaucasia in the Paleogene.
Trudy VNIGNI no.32:108-121 '60. (MIRA 14:7)

1. Groznenskiy nauchno-issledovatel'skiy neftyanoy institut.
(Caucasus, Northern--Geology, Structural)

SOLOV, V. D., Cand. Geol-Mineral. sci. (diss) "Paleogene Depo-
sites of Eastern Caucasus in Connection with Prospects for
Commercial Oil Development," Moscow, 1961, 18 pp (Moscow State
Univ.) 110 copies (KL Supp 12-61, 259).

SOMOV, V.D.; KOROBEKOV, I.A.

Stratigraphic significance and composition of mollusk fauna found in a section of the Maikop series of the TSraudon River (North Ossetia). Dokl. AN SSSR 152 no.3:699-702 S '63. (MIRA 16:12)

1. Groznenskiy neftyanoy nauchno-issledovatel'skiy institut i Leningradskiy gosudarstvennyy universitet im. A.A.Zhdanova. Predstavleno akademikom D.V.Nalivkinym.

СОН В, В.В.

Oligocene horizons in the Northern Caucasus. Dokl. Akad. Nauk SSSR 161
no.6:1395-1396 Apr '65. (MIRA 18:5)

I, Gruzniyskiy neftyanoy nauchno-issledovatel'skiy institut. Sub-
mitted May 28, 1964.

SOMOV, V.I., inzhener; GAGARINA, A.A., kandidat tekhnicheskikh nauk;
KAGANOVICH, G.D., inzhener

Precast reinforced concrete columns and span pieces for multi-
storey building frames. Stroi.prom.33 no.6:7-9 Je'55.
(Precast concrete construction) (MLRA 8:10)

SMOLYAR, A. A. ; SOMOV, V. I.

The PVK-25 vibratory road roller. Biul.tekh.-ekon.inform. no.8:42-
44 '60.

(MIRA 13:9)

(Road rollers)

ACC NR: AT6032430

(A)

SOURCE CODE: UR/3133/66/000/009/0032/0035

AUTHOR: Senov, V. I.

ORG: L'vov Branch of the Institute of Geophysics, AN UkrSSR (L'vovskiy filial instituta geofiziki, AN UkrSSR)

TITLE: Geological interpretation of the graph of accumulated increment differences along the profile: Zolochev-L'vov-Batevo-Uzhgorod

SOURCE: AN UkrSSR. Mezhdudevomstvennyy geofizicheskiy komitet. Informatsionnyy byulleten', no. 9, 1966. Geofizika i astronomiya, 32-35

TOPIC TAGS: tectonics, geologic survey, physical geology, geodetic survey, regional study

ABSTRACT: An analysis of data from a high precision closed survey of the regional profile indicated that there are differences in levels from movements due to the block structure of the area. The data indicate the existence of deep contacts along which individual blocks move vertically. A graph is given showing cumulative differences in elevation due to uplift for the following intervals: 1--1897-1932, 2--1897-1954, 3--1897-1964, 4--1932-1963, 5--1948-1963, 6--1954-1963, and also probable zones of tectonic unconformities and leveling benchmarks. (The ordinate is in mm of positive or negative uplift; the abscissa is in km from Zolochev). It is concluded that, compared with the other tectonic zones of the region, the Trans-Carpathian downwarp lagged

Card 1/2

ACC NR: AT6032430

in being uplifted by $v_{abs} = +7.9$ mm/year. Such a deduction is in agreement with ideas of other investigators who studied the development of the relief during Neogene-Anthropogene. Contrasts in vertical displacements of different signs in the Carpathian region attained a maximum in Neogene. At the beginning of Anthropogene, descending movements became localized only within the Trans-Carpathian downwarp. Since the end of Oligocene, the folded Carpathians became included in the region of intermittent ascending movements, the total uplift amounting to some 1500 m. The Pre-Carpathian flexure is also being converted into a region of intermittent ascending movements although before the Upper Miocene, the region had undergone some intense sinkings. During Pliocene and Meso-Pleistocene, movements in the eastern and western parts of the Trans-Carpathian downwarp reversed their signs and the uplift began. The Volyn'-Podolia plate is characterized by such ascending movements. Thus, the quantitative leveling data confirm the inherited character of modern movements at the end of the Neo-tectonical stage. This implies the continued development of geologic structures in the Carpathian region.

SUB CODE: 08/ SUBM DATE: none/ ORIG REF: 008

Card 2/2

SOMOV, Valentin Ivanovich; EZDRIN, Konstantin Borisovich; ANISIMOV, Poliko Vladimirovich, inzh.; UKRAINCHIK, M.M., inzh., red.

[Residential building made of three-dimensional vibration-rolled elements; from construction practices in block no. 113 of Novyye Kuz'minki (Moscow)] Zhiloi dom iz ob'emnykh vibroprokatnykh elementov; opyt stroitel'stva v 113 kvartale Novykh Kuz'minok (Moskva). Moskva, Gosstroizdat, 1961. 41 p. (MIRA 15:8)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stvu. Byuro tekhnicheskoy informatsii. 2. Glavnyy inzhener konstruktorskogo otdela Moskovskogo instituta tipovogo i eksperimental'nogo proyektirovaniya Moskovskogo gorodskogo sove-ta deputatov trudyashchikhsya (for Somov). 3. Rukovoditel' gruppy metodicheskikh kabinetov tresta "Mosorgstroy" Glavnogo otdeleniya po zhilishchnomu i grazhdanskoru stroitel'stvu v gorode Moskve (for Ezdrin). 4. Metodicheskiy kabinet tresta "Mosorgstroy" na zastroyke rayona Novyye Kuz'minki (for Anisimov).

(Precast concrete construction)
(Moscow--Apartment houses)

SOMOV, Vasilii Iosifovich; GUSEVICH, N.A., red.; YERMAKOV, M.S.,
tekh. red.

[The economic law of the rising productive capacity of
public labor] Ekonomicheskii zakon povyshaiushcheisia
proizvoditel'noi sily obshchestvennogo truda. Moskva,
Izd-vo Mosk. univ., 1963. 258 p. (MIRA 17:1)

SMOLYAR, A.A., inzh.; SOMOV, V.I., inzh.

PVK attached rollers developed by Volgogradgidrostoi.
Stroi. i dor. mash. 7 no.8:7-10 Ag '62. (MIRA 15:9)
(Rollers (Earthwork))

METHODS AND PROPERTIES INDEX

SOMOV V. S.

A-1

BC

Methods of determining hydration. I. Analytical and potentiometric methods. V. S. Somov (Kolloid. Zhurn., 1960, 8, 661-677).—A correct calculation of "bound water" (or negative adsorption) has to take into account dissolution of the adsorbent and adsorption of the "indicator" by it. On the assumption that these corrections are independent of the concn. of the indicator their calculation is possible if results of the negative adsorption at three concns. are given. The equations obtained are applied to the negative adsorption of sucrose, glucose, and $\text{CO}(\text{NH}_2)_2$ by dried and ground beet-root; the apparent hydration decreases from sucrose to $\text{CO}(\text{NH}_2)_2$. The adsorption of glucose by starch is positive below 0.66% of glucose and negative at higher concns. High indicator concns. give more trustworthy results than low ones.

J. J. B.

METALLURGICAL LITERATURE CLASSIFICATION

CA Somov V.S.

.....
Apparatus for sedimentation analysis of suspensions and emulsions. V. S. Somov and I. Ya. Zhukovskaya (Kuban Med Inst, U.S.S.R.). *Zentralblatt* 10, 11:00 (1950)
The app. is a torsion balance of a simple type, one level of which serves as an indicator pointer while the other carries the sedimentation collector disk suspended in the beaker contg. the test substance. G. M. Kosolapoff

SOMOV, Ye.Ye.

Congenital achromatism. Vestn. oftal. 76 no.4:71-74 JI-Ag'63
(MIRA 17:1)

1. Kafedra oftal'mologii (nachal'nik - prof. B.L. Polyak)
Voyenno-meditsinskoy ordena Lenina akademii ineni S.M. Kirova.

OKSMAN, Ya.B.; BABAYEV, A.; BOGUSH, G.; DOLINA, Ye.; KOVYNEV, B.; MIRNYI, G.;
RUBEO, Stelio(Italiya); SING, Ramkhandr (Indiya); SOMOY, Yu.; KHARSH,
D'yerd'(Vengriya); YUR'YEV, N.; YANEV, Kirill (Bolgariya); LAPIDUS,
M.A., red.; BALLOD, A.I., tekhn.red.

[Foreign visitors on Soviet agriculture; impressions of participants
in the Sixth World Festival of Youth and Students] Zarubezhnye
gosti o sel'skom khoziaistve SSSR; vpechatleniia uchastnikov VI
Vsemirnogo festivalia molodezhi i studentov. Moskva, Gos.izd-vo
sel'khoz.lit-ry, 1958. 239 p. (MIRA 12:4)
(Agriculture)

СОВЕТСКИЙ

Analysis is a sine qua non of industrial design. Tekh.est. no.5:1-5
My 198. (MIRA 18:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut tekhnicheskoy
estetiki.

ТОМОВ, Ю.

Analysis, and indispensable condition of industrial design.
Tekh. est. no.6:10-14 Je '65. (MIRA 18:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut tekhnicheskoy
estetiki.

ACCESSION NR: AT4033532

S/0000/63/000/000/0162/0169

AUTHOR: Nefedova, I. D. (Candidate of chemical sciences); Somova, A. A.;
Maslennikova, A. A.

TITLE: Stainless steel for equipment producing caprolactam by air oxidation of
cyclohexane

SOURCE: Poluprodukty*dlya sinteza poliamidov (Intermediates for polyamide synthesis).
Moscow, Goskhimizdat, 1963, 162-169

TOPIC TAGS: stainless steel, steel corrosion resistance, caprolactam, adipic acid,
cyclohexane, cyclohexane air oxidation, caprolactam production, adipic acid production,
cyclohexane oxidation equipment

ABSTRACT: Samples of ten stainless steels (designations and chemical composition
given) were tested for effects of corrosive environments present in the reactor, separa-
tor, filter, distillation column, reservoir and sedimentation tank of a plant producing
caprolactam and adipic acid by air oxidation of cyclohexane. Temperatures ranged from
140C to room temperature, pressures from 0 to 18 atm., exposures from 784 to 849
hours. Analysis of the results, expressed in terms of corrosion rates and presented
graphically and in tabular form, indicates that Mo alloyed steels are best suited for the

Card 1/2

ACCESSION NR: AT4033532

basic separator components of a plant. Steels containing 0.03 to 0.04% and the Nb alloyed steel Kh19N14B exhibited best corrosion resistance in the principal components of a plant producing adipic acid. Orig. art. has: 3 tables and 3 graphs.

ASSOCIATION: None

SUBMITTED: 12Oct63

DATE ACQ: 06Apr64

ENCL: 00

SUB CODE: MM, OC

NO REF SOV: 000

OTHER: 000

Card 2/2

Kova, A. N.

"Vegetative Hybridization of Bacteria, Report II, Pathogenic Characteristics of Para-Agglutinating Strains of Intestinal Bacilli", Zhur Mikrobiol, Epidemiol i Immunobiol, No. 2, pp 16-21, 1950.

SOMOVA A.G.

"Vegetative Hybridization of Bacteria, Report II, Pathogenic Characteristics of Para-Agglutinating Strains of Intestinal Bacilli," Zhur Mikrobiol, Epidemiol i Immunobiol, 1951, No.2.

Mikrobiologiya, Vol. XX, No.5, 1951 W-24635.

SOMOVA, A.G.

Etiology of scarlet fever; preliminary report. Mikrobiol.zhur. 16
no.3:60-63 '54. (MLRA 8:7)

1. Z kafedry mikrobiologii Chernivetskogo medichnogo instituta.
(SCARLET FEVER, bacteriology,
Streptoc.)

SOMOVA, A.G.

Nature of the hemagglutination reaction with virus-coated bacteria
in scarlet fever. Mikrobiol. zhur. 17 no.1:22-27 '55

(MLRA 10:5)

1. Z kafedri mikrobiologii Chernivets'kogo medichnogo institutu.
(SCARLET FEVER, microbiology,
bact. infected with viruses obtained by pharyngeal
lavage, hemagglut. reaction) (Uk)
(VIRUSES,
bact. infected with viruses from pharyngeal lavage in
scarlet fever, hemagglut. reaction) (Uk)

SOMOVA, A.G.

EXCERPTA MEDICA Sec.4 Vol.9/8 Microbiology, etc. Aug56

1945. SOMOVA A.G. *Filtrable forms of haemolytic streptococci in broth cultures (Russian text) MIKROBIOLOGIJA 1955, 24/3 (280-284) Tables 3

Filtrable forms have been found in filtrates of Streptococcus haemolyticus strains grown on yeast broth or in embryonated chicken egg. The strains were isolated from cases of scarlet fever.

Makstenieks - Leyden.

Chernovitsky Med. Inst.

SOMOVA, A.G.; GHRASYUK, L.G.

Active specific prevention of Q fever. Zhur.mikrobiol.epid. i immun.
27 no.11:12-17 N '56. (MLRA 10:1)

1. Iz Rostovskogo-na-Donu instituta Ministerstva zdavookhraneniya
SSSR.

(Q FEVER, prevention and control,
vacc. in Russia (Rus))

KORHANOVA, V.G.; PETROVSKIY, I.N.; ~~SOLOV, A.G.~~; NIKOL'SKAYA, T.A.; SEMATEK,
A.V.; ZHURNEKO, A.A.; BALABANOVA, V.I.; LIPARSKAYA, V.G.; KHARATIYAN,
M.M.; KOMPARETS, Ye.M.

Outbreak of Q fever in the Krasnodar Province. Zhur.mikrobiol.soid. 1
izdaniye 28 no.6:29-33 Je '57. (MIRA 10:10)

1. In Rostovskogo instituta epidemiologii, mikrobiologii i gigieny,
kafedry infektsionnykh bolezney Rostovskogo meditsinskogo instituta,
Rostovskogo instituta Ministerstva zdravookhraneniya SSSR i Gosstroy
kavkazskoy sanitarno-epidemiologicheskoy stantsii

(Q FEVER, epidemiology,
in Russia (rus))

USSR/Virology - Human and Animal Viruses.

E-3

Abs Jour : Ref Zhur - Biol., No 4, 1958, 14604

Author : Romanova, V.P., Petrovskiy, I.N., Somova, A.G.,
Nikolskaya, T.A., Shmatko, R.V., Kosenko, A.A.,
Balabanova, V.I., Liparskaya, V.G., Kharatyan, M.A.,
Kompanets, E.M.

Inst : -

Title : Epidemic of Q-Fever in Kamensk Region.

Orig Pub : Zh. mikrobiol., epidemiol. i immunobiologii, 1957, No 6,
29-33

Abstract : No abstract.

Card 1/1

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652410016-5"

SOMOVA, A.G.; GERASYUR, L.G.; DEBOSENKO, A.I.

Data on the serodiagnosis and epidemiology of typhus. Zhur. mikrobiol.
epid. i immun. 29 no.11:78-82 N '58. (MIRA 12:1)

1. Iz Rostovskogo-na-Donu instituta Ministerstva zdravookhraneniya SSSR
i Gorodskoy sanitarno-epidemiologicheskoy stantsii.

(TYPHUS,

epidemiol. & serodiag. (Rus))

POLYAKOV, I.I.; SOMOVA, A.G.; SILICH, V.A.; KHAKHINA, Z.D.; GERASYUK, L.G.

Experimental mixed Q fever and brucellosis. Report No.2:
Characteristics of the course of brucellosis. Zhur.mikrobiol.
epid. i immun. 30 no.3:106-110 Mr '59. (MIRA 12:5)

1. Iz Rostovskogo-na-Donu nauchno-issledovatel'skogo protivochum-
nogo instituta Ministerstva zdravookhraneniya SSSR i Instituta
epidemiologii i mikrobiologii imeni Gamalei AMN SSSR.

(BRUCELLOSIS, exper.

eff. of Q fever (Rus))

(Q FEVER, exper.

eff. on brucellosis (Rus))

SOV/16-60-2-16/35

17(2,6)

AUTHORS:

Khakhina, Z.D., Somova, A.G., Silich, V.A., Polyakov, I.I., Gerasyuk, L.G.

TITLE:

Experimental Mixed Infection With Q-Fever and Brucellosis. III. The Pathomorphology of Mixed Infection

PERIODICAL:

Zhurnal mikrobiologii, epidemiologii i immunobiologii, 1960, Nr 2, pp 77 - 82 (USSR)

ABSTRACT:

Parts I and II appeared in Zhurnal mikrobiologii, epidemiologii i immunobiologii, 1959, Nr 3. Subject section is an account of the experiments performed on guinea pigs to determine the features of Q-fever and brucellosis in a mixed infection, with the two components injected simultaneously or at intervals. Deviations from the normal course of infection were noted for each of the components. The guinea pigs were cleared more quickly of Rickettsia burneti. Brucellosis was less marked after simultaneous infection or pre-infection with R. burneti. The pathologo-morphological lesions were less pronounced than would have been the case had the animals been infected with one of the causative agents proper. It was found that the rate of change in the course of the infection depended on the interval between the administration of R. burneti

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SOV/16-60-2-16/35

Experimental Mixed Infection With Q-Fever and Brucellosis. III. The Pathomorphology of Mixed Infection

and Brucella. The most marked deviation from the normal course was observed when the second infection was performed one month after the first. The development of brucellosis in animals previously infected with Q-fever was slower than in the control group, the lesions developed later and cleared up more rapidly. Q-fever in animals previously infected with Brucella differed markedly from the normal clinical course: lack of infiltrate at the site of infection, more marked febrile reaction, increased complement-fixation antibody titer (4 - 5 times higher than in the control group), more rapid sterilization of the body of Rickettsia. Brucellae were isolated slightly more frequently in these animals but the tissue lesions were less pronounced. Sero-allergic reactions with brucellosis antigen and the accompanying phagocytic activity of the leukocytes were depressed. The results may be of value in diagnosis (veterinary and medical) and in associated vaccination against brucellosis and Q-fever. There are: 3 photographs and 2 references, 1 of which is Soviet and 1 English. ✓

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Experimental Mixed Infection With Q-Fever and Brucellosis. III. The Pathomorphology
of Mixed Infection

SOV/16-60-2-16/35

ASSOCIATION: Rostovskiy-na-Donu nauchno-issledovatel'skiy institut Ministerstva
zdravookhraneniya SSSR (Research Institute of the Ministry of Public ✓
Health of the USSR, Rostov-on-Don); Institut epidemiologii i mikro-
biologii imeni Gamalei AMN SSSR (Institute of Epidemiology and Micro-
biology imeni Gamaleya of the AMN, USSR)

SUBMITTED: May 12, 1958

Card 3/3

SOMOVA, A.G.

Effect of antibiotics on *Vibrio cholerae*. Antibiotiki 5 no.6:60
55 N-D '60. (MIRA 14:3)

1. Rostovskiy-na-Donu gosudarstvennyy nauchno-issledovatel'skiy
protivochumnyy institut.
(VIBRIO COMMA) (ANTIBIOTICS)

SOMOVA, A.G.; GERASYUK, L.G.; AFANAS'YEVA, M.K.; SILAKOVA, Ye.Ya.;
AZAROVA, A.G.; ALANIYA, I.I.; KOSAREVA, A.V.; SOLOV'YVA, A.V.;
KRASHNOVA, N.V.

Problem of endemic rat typhus on the Black Sea coast. Zhur.
mikrobiol.epid.i immun. 31 no.2:51-56 P '60. (MIRA 13:6)

1. Iz Rostovskogo-na-Donu nauchno-issledovatel'skogo instituta
Ministerstva zdravookhraneniya SSSR i portovykh protivochumnykh
laboratoriy v Odesse, Batumi i Novorossiyske.

(TYPHUS MURINE epidemiol.)

(TYPHUS veterinary)

(RATS diseases)

SONOVA, A.G.

Phage and antibiotic treatment of experimental cholera. Antibiotiki
7 no.2:128-135 F '62. (MIRA 15:2)

1. Rostovskiy-na-Donu nauchno-issledovatel'skiy protivochumnyy
institut.

(BACTERIOPHAGE) (CHOLERA, ASIATIC)
(ANTIBIOTICS)

SOMOVA, A.G.

Vibrinocins of the cholera pathogen. Zhur. mikrobiol., epid.
i immun. 42 no.6:124-129 '65. (MIRA 18:9)

I. Kostovskiy-na-Donu nauchno-issledovatel'skiy protivochumnyy
institut.

GLIKMAN, S.A.; YEFREMOVA, O.G.; KOSYREVA, I.K.; SOMOVA, A.I.

Conditions for the production of "thermally stable" ethylcellulose. Zhur. prikl. khim. 31 no.7:1087-1091 J1 '58.
(Cellulose) (MIRA 11:9)

S/190/60/002/012/008/019
B017/B055

AUTHORS: Katibnikov, M. A., Yermolenko, I. N., Somova, A. I.,
Yefremova, O. G., Glikman, S. A.

TITLE: Spectroscopic Study of Cellulose Ethers. I. On the
Applicability of Spectroscopic Methods for Characterizing
the Photochemical Reactions of Ethyl Cellulose

PERIODICAL: Vysokomolekulyarnyye soyedineniya, 1960, Vol. 2, No. 12,
pp. 1805-1810

TEXT: The ultraviolet, infrared and luminescence spectra of ethyl cellulose preparations with varying carboxyl content were investigated. Ultraviolet irradiation of ethyl cellulose was found to change the luminescence spectra and intensities. These changes are particularly marked at the beginning of irradiation, thus permitting the first stages of degradation of the ethyl cellulose chains to be determined. It is shown that the sensitivity to light increases with the carboxyl content of ethyl cellulose. Neutralization of the carboxyl groups by Pb- and Na ions increases the light stability of the compounds. It is assumed that the presence

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Spectroscopic Study of Cellulose Ethers.

S/190/60/002/012/008/019

I. On the Applicability of Spectroscopic

B017/B055

Methods for Characterizing the Photochemical Reactions of Ethyl Cellulose

of carboxyl groups in ethyl cellulose compounds accelerates the photochemical reactions initiated by ultraviolet light. This is in agreement with a previously expressed assumption that the carboxyl groups play an essential role in the thermooxidative degradation of ethyl cellulose. The ultraviolet absorption spectra of ethyl cellulose preparations in the 210 - 400 mμ region are given in Fig. 1. Fig. 2 shows the infrared absorption spectra of ethyl cellulose preparations, run on the MKC-14 (IKS-14) spectrometer. The luminescence spectra of these preparations are given in Fig. 3. The intensity of the luminescence of ethyl cellulose preparations after ultraviolet irradiation at 420 and 470 mμ is represented in Fig. 4. The luminescence spectra of preparations treated with $Pb(NO_3)_2$ and NaOH are shown in Figs. 5 and 6. Luminescence was excited by a Hg quartz lamp type CBДШ-250 (SVDSH-250), spectra being taken by means of a УМ-2 (UM-2) monochromator and ФЭУ-17 (FEU-17) photomultiplier, and recorded by an ЭПН-09 (EPP-09) potentiometer. There are 6 figures and 17 references: 10 Soviet, 5 US, 1 German, and 1 French.

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Spectroscopic Study of Cellulose Ethers. S/190/60/002/012/008/019
I. On the Applicability of Spectroscopic B017/B055
Methods for Characterizing the Photochemical Reactions of Ethyl Cellulose

ASSOCIATION: Saratovskiy gosudarstvennyy universitet im. N. G.
Chernyshevskogo (Saratov State University imeni N. G.
Chernyshevskiy). Institut obshchey i neorganicheskoy khimii
AN BSSR (Institute of General and Inorganic Chemistry of the
Academy of Sciences BSSR)

SUBMITTED: May 19, 1960

Card 3/3

YAMOLENKO, I.N.; KATIBNIKOV, M.A.; SLOVA, A.I.

Spectroscopic study of cellulose ethers. Part 2: Thermal and light stability of carboxyethylcellulose. Vysokom. soed. 3 no.1:30-32 Ja '61.

1. Saratovskiy gosudarstvennyy universitet im.N.G.Chernyshevskogo
i Institut obshchey i neorganicheskoy khimii AN BSSR.
(Cellulose)

E. V. SOMOVA

Metallurgical Abstracts
 July 1954
 Properties of Metals

(3) 4

✓ Internal Adsorption of Silver in Platinum. V. I. Arkharov, E. V. Somova, and T. P. Chukina (*Doklady Akad. Nauk S.S.S.R.*, 1951, 76, (2), 209-210).—[In Russian]. Variations in the distribution of Ag in Pt-0.6% Ag solid soln. have been studied. Sheet specimens measuring $10 \times 50 \times 1$ mm. were held at the temp. of max. solubility of Ag (1180°C .) for 2 hr., quenched in water, then immersed in 250 c.c. *aqua regia* at $20^\circ\text{--}25^\circ\text{C}$. for 5 min.; during this period a surface layer 2.5×10^{-4} cm. thick was removed, corresponding to a loss in weight of 0.6 mg. (surface area = 11.2 cm^2). After removing the specimen from the acid, washing, and drying, the cycle of thermal and chem. treatments was repeated 80 times, the weight being determined before and after each etching. There was no change in weight during heat-treatment; the total loss in weight was 50.5 mg. The same portion of etchant was used each time, the resulting soln. being evaporated to dryness and the residue (I) analysed spectrographically. In control experiments, a specimen heat-treated at 1180°C . and quenched was given a single 150-min. etch in *aqua regia* at 28°C . (loss in weight = 50 mg.) (II); and 60 mg. pure Pt and 0.25 mg. pure Ag were dissolved in another portion of acid (III). These control soln. were also evaporated to dryness and analysed. A 5-amp. D.C. arc between Hilger pure C electrodes, 2-mm. gap, and 2-min. exposure were used. The intensities of the Ag lines (3342.9 and 3280.7 Å.) relative to those of Pt (3004.7, 2929.8, and 2659.4 Å.) were less for II and III than for I, showing that in the quenched alloy the concentration of Ag in the surface layers is greater than its mean concentration, i.e. there is positive internal adsorption. To confirm this, 2.5 g. filings (0.05-0.1 mm.) of the alloy, heated at 1180°C . for 40 min. then quenched, were given a single etch in *aqua regia* for 5 min., 60 mg. being dissolved. Analysis of the soln. again gave more intense Ag lines than in the case of the control soln.—G. V. E. T.

L 42270-66
ACC NR: AP6031670

SOURCE CODE: UR/0219/66/061/001/0101/0105
11

AUTHOR: Sonova, G. P.
ORG: Department of Histology and Embryology, headed by Prof. A. A. Yel'tsin,
Corresponding Member AMN SSSR, Voronezh Medical Institute (Kafedra gistologii i
embriologii Voronezhskogo meditsinskogo instituta)

TITLE: Effectiveness of homotransplantation of the thyroid into the anterior chamber
of the frog eye

SOURCE: Byulleten' eksperimental'noy biologii i meditsiny, v. 61, no. 4, 1966, 101-105

TOPIC TAGS: thyroid gland, endocrinology, experiment animal

ABSTRACT: On homotransplantation of the thyroid gland into the anterior chamber of
the eye of Rana ridibunda frogs, the transplants retained their typical structure
and functional capacity (as indicated by formation of new follicles) for up to 90 days.
Combined transplantation of the thyroid with a part of the hypothalamus (preoptic
region of the diencephalon) did not produce any additional changes in the thyroid
transplants. Combined transplantation of the thyroid with the hypophysis or of the
thyroid with the hypophysis and the preoptic region resulted in changes in the
structure of hypophysis, but no marked changes in the thyroid were observed. The
thyroid transplants showed less local deterioration during the first few days and
the percentage of successful transplantations was higher when the thyroid was
transplanted together with the hypophysis. Orig. art. has: 3 figures. [JPRS: 36,932]

SUB CODE: 06 / SUBM DATE: 09Jul64 / ORIG REF: 011 / OTH REF: 004

UDC: 612.44:612.6.02

Card 1/1 *bdh*

0919 09:70

SOMOVA, K.T., ZOFIN, Yu.A.

Lymphoid variety of the Melkersson-Rosenthal syndrome. Vest.
derm. i ven. 38 no.12:32-34 0 '64. (MORA 1818)

1. Kafedra terapevticheskoy stomatologii (zav.- dotsent R.Ya.
Zekker) i kafedra khirurgicheskoy stomatologii (zav.- doktor
med. nauk S.N. Pravednikov) Kemerovskogo meditsinskogo instituta.

SOMOVA, K.T.

Morphological changes in aseptic inflammation of the dental pulp under the local influence of some antibiotics. Stomatologia 43 no.1: 27-30 Ja-F'64 (MIRA 17:4)

1. Kafedra terapevticheskoy stomatologii (zav. - kand. med. nauk R.Ya. Pekker) Kemerovskogo meditsinskogo instituta.