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REEL # 31  
BAKA YEV, N.  
TO

"APPROVED FOR RELEASE: 06/06/2000

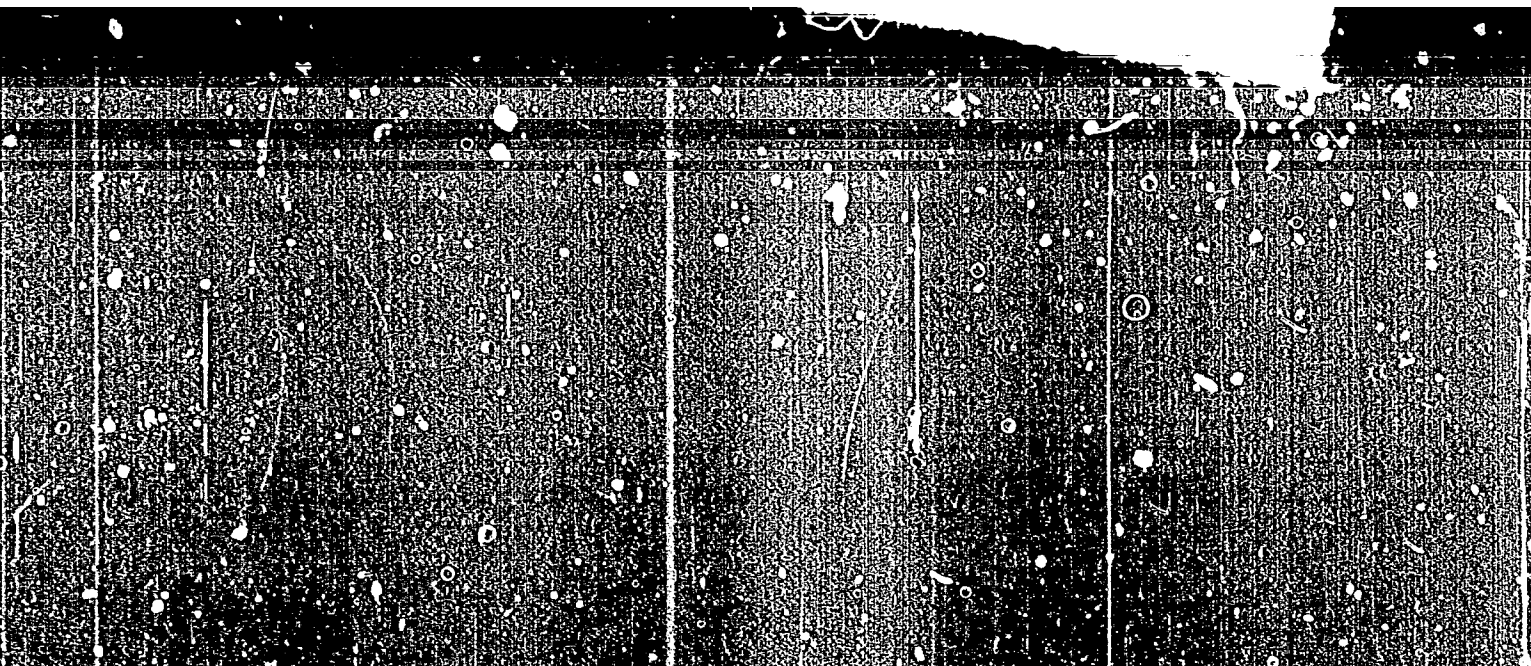
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CIA-RDP86-00513R000103110001-4"

BAKAYEV, N.; VLASIKHIN, A.V., podpolkovnik, red.; SRIBNIS, N.V.,  
tekhn.red.

[Strict maintenance of internal discipline] Strogo sobliudat'  
vnutrennii poriadok. Moskva, Voen.isd-vo M-va obrony SSSR,  
1954. 31 p. (MIRA 14:4)

(Military discipline)

(

SOV/85-59-12-8/38

AUTHOR: Bakayev, N., Lt.Col.

TITLE: The Noble Make-Up of a Defender of His Motherland

PERIODICAL: Knyl'ya rodiny, 1959, Nr 12, pp 8-9 (USSR)

ABSTRACT: This article explains the Soviet serviceman's Oath of Allegiance. The author cites several examples of heroism from the past and present as illustrations

Card 1/1

BAKAYEV, N.

"In the name of soldier heroes" by N.G.Kuz'min. Reviewed by N.  
Bakaev. Voen. vest. 41 no.2:123-124 F '62. (MIRA 15:3)  
(World War, 1939-1945) (Kuz'min, N.G.)

BAKAYEV, N.

Proper utilization of graduates in production. Prof.-tekh.obr.  
11 no.8:6 N '54. (MLRA 8:1)

1. Direktor uchilishcha mekhanisatsii sel'skogo khozyaystva No.19  
Kazakhskoy SSR.  
(Employment management)



BAKAYEV, N., podpolkovnik

Communist crew members of a warship armed with rockets. Kom. (MIRA 15:7)  
Vooruzh.Sil 2 no.15:51-54 Ag '62. (Rockets (Ordnance))  
(Russia--Navy)

S/123/60/000/008/009/017  
A004/A001

Translation from: Referativnyy zhurnal. Mashinostroyeniye, 1960, No. 8, p. 90, # 37925 ✓

AUTHOR: Bakayev, N.A.

TITLE: Industrial Investigations of Metal Cutting Machine Tool Designs<sup>14</sup>

PERIODICAL: Tr. Taganrgsk. radiotekhn. in-ta, 1957, Vol. 3, No. 2, pp. 271-278<sup>14</sup>

TEXT: The author gives a brief description of the comprehensive method applied at the machine shop of the Combine Plant and at the 1st GPZ for investigating automatic and semi-automatic machine tools. This method makes it possible to judge on the constructives and operational properties of machine tools, qualification of setters and operators, manufacturing conditions, technology and tools, and to point out ways and means for an increase in labor productivity. The method was worked out on the basis of the Shaumyan theory, according to which the fundamental characteristic of the constructive and operational qualities of a machine tool is its piecework capacity. An investigation of the design is carried out in the following succession: 1) studying the losses in running time under consideration of the operation conditions existing in the shop; 2) analyzing running  
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S/123/60/000/008/009/017  
A004/A001

Industrial Investigations of Metal Cutting Machine Tool Designs ✓

time losses with the aid of a system of efficiency balances and graphs; 3) conclusions on a possible increase in efficiency and trends in the modernization of the machine tool; 4) test conditions are arranged at the work place, ensuring a decrease in running time losses, and experimental cutting conditions are tested; 5) final conclusions and recommendations. There are 4 figures, 2 tables and 1 reference.

Abstractor's note: This is the full translation of the original Russian abstract.

K.Ye.A.

Card 2/2

BAKAYEV, N. ., kand. tekhn. nauk

Assembly of the main building of a heat and electric power  
plant using roof cranes. Prom. stroi. 43 no.10:20-21 '65.  
(MIRA 18:11)

25(1,5)

AUTHOR:

Bakayev, N.A.

SOV/159-58-3-11/31

TITLE:

A Method of Production Investigations of Metal-Cutting Machine Tools

PERIODICAL:

Nauchnyye doklady vysshey shkoly, Mashinostroyeniye i priborostroyeniye, 1958, Nr 3, pp 70-76 (USSR)

ABSTRACT:

In this article the author describes a comprehensive method of investigating the construction of multi-spindle, semi-automatic machine tools under actual operation conditions. The comprehensive method is based on the theory of optimum machine tool productivity of Professor Shaumyan, A.G. (1952). According to this theory, the principal index of the design perfection of a machine tool is the productivity of items, which is found as a functional dependence of the operating conditions and the losses of work time. The losses are idling runs of the machine tool and all unproductive spending of work time. The investigation consists of studying the work time losses under shop conditions, analyzing the losses of work time by pro-

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SOV/159-58-3-11/31  
A Method of Production Investigations of Metal-Cutting Machine  
Tools

ductivity graphs. Further conclusions may be made concerning modernization of the respective machine tool and an experimental study of the theoretic forecasts. Final conclusions and recommendations may be made using the available information. The author then presents analysis methods for work time losses, first by means of productivity balance systems, and second, by productivity graphs. Then the machine tool may be tested at higher cutting speeds and the results are investigated. The author cites as an example the investigation of the multi-spindle, semi-automatic machine tool 1261P used in a plant producing harvesting machines for the manufacture of bearing covers. Using this method a productivity increase of approximately 63% was achieved and additional recommendations were made for a design improvement.

Card 2/3

A Method of Production Investigations of Metal-Cutting Machine  
Tools

SOV/159-58-3-11/31

There are 1 table, 3 graphs and 1 Soviet reference.  
This article was presented by the  
Kafedra "Tekhnicheskaya mekhanizatsiya" Taganrogskego  
radiotekhnicheskogo instituta (Chair "Technical Mechan-  
ization" of the Taganrog Radio Engineering Institute)

SUBMITTED: November 20, 1957

Card 3/3

BAKAYEV, N.A.

The precast reinforced concrete industry in the Bratsk power  
industry district. Bet. 1 zhel.-bet. no.10:457-458 O '61.  
(MIRA 14:12)

1. Glavnyy spetsialist proyektnoy kontory Bratskgesstroya,  
Bratskiy energopromyshlennyy rayon.  
(Bratsk Region--Precast concrete)



SHAY V, N.N., inst.; KUMARICHEV, N.N., inst.

practices in the organizational and technical preparation of the  
production of precast concrete for the construction of a lumbering  
industry complex. Prom. stroi. 42 no.9:13-17 3 '64. (MIA 17:10)

1. Stroitel'stvo Bratskoy gidroelektrantsii.

PAKAYEV, N. N.

"Riboflavin Deficiency in Chronic Dysentery; Clinical and Laboratory Findings," Sov. med., 16, No.2, 1952

RAKAYEV, N.M.

Methods for accumulating moisture in the Virgin Territory.  
Zemledelie 25 no.8:54-61 Ag '63. (MIRA 16:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zernovogo  
khozyaystva.

(Virgin Territory—Soil moisture)

BAKAYEV, Nikolay Vasil'yevich, podpolkovnik; BELANOVSKIY, A.V., gvardii  
polkovnik, reaktor; MASHIKOVA, T.F., tekhnicheskiy redaktor

[Training expert antiaircraft gunners] Rastit' masterov zenitnogo  
ognia; iz opyta partiino-politicheskogo obespechenia zenitno-artille-  
riakikh strel'b. Moskva, Voen. izd-vo M-va obor. SSSR, 1956. 8) p.  
(Antiaircraft guns) (MIRA 10:4)

BAYAYEV, Nikolay Vasil'yovich; SVIRIDOKHIN, I.I., podpolkovnik,  
red.; MASLOVA, N.Ya., tekhn. red.

[Beacons are calling forward] Maiaki zovut vpered. Moskva,  
Voenizdat, 1962. 50 p. (MIRA 15:8)  
(Russia--Armed Forces--Military construction operations)

BAKAYEV, O. [Bakalev, O.]

Cybernetics and planning. Nauka i zhyttia 11 no.2:20-23 F '62.  
(MIRA 15:3)

1. Glavnyy inzh. otdela ekonomicheskoy kibernetiki Vychislitel'nogo  
tsentra AN USSR.  
(Cybernetics) (Programming (Mathematics))

NIKITIN, S.O.; PROKHOROV, V.N.; VASYUKINA, P.M.; BAKAYEV, S.M.

Drying the base and heating the layers of rolled roofing materials in carrying out roofing work during winter. Rats. 1 isobr. predl. v stroi. no.2:87-90 '57. (MIRA 11:1)  
(Drying apparatus) (Roofing--Cold weather conditions)

5(4)

AUTHORS:

Bakayev, V. A., Kiselev, V. F.,  
Krasil'nikov, K. G.

SOV/20-125-4-40/74

TITLE:

The Reduction of the Melting Temperature of Water in the  
Capillaries of a Porous Body (Ponizheniye temperatury plavleniya  
vody v kapillyarakh poristogo tela)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 125, Nr 4, pp 831-834  
(USSR)

ABSTRACT:

From the data concerning the phase composition of an adsorbed substance as a function of temperature it is possible to determine the quantitative characteristic of the structure of a porous body by determining not only the radius but also the volume of the capillaries in which the phase transformations take place. The quantity of adsorbed substance in 1 g of the adsorbent melting at the temperature T can be determined from the specific heat of the system adsorbent-adsorbed substance. A more simple, but sensitive method is that of indirect determination of heat capacity by measuring the temperature conductivity  $\lambda$  of the system. The authors carried out these measurements by employing the modified method of "linear temperature increase". The adsorbents used were the silica gels KSK-2,

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The Reduction of the Melting Temperature of Water in the SOV/20-125-4-40/74  
Capillaries of a Porous Body

KSM-1 and a specimen of a non-porous alumina 3S-1. In these samples the isothermal lines of the adsorption of water vapors were measured. Measurements of temperature conductivity were carried out ranging from the temperature of liquid nitrogen to the temperature of 275° K. The dependences of the quantity  $\text{const}/\lambda$  on temperature thus determined are shown by a diagram. The theory of capillary condensation shows a connection between the reduction of temperature of the phase transformation and the radius of the capillaries containing the adsorbent substance. A connection between the freezing temperature of water and the radius of the pores can be derived. The points in the diagram  $\Delta T = f(10^3/r)$ , which were determined for various samples and by various methods, are well suited for a straight line. The method of determining  $\text{const}/\lambda$  suggested by the authors makes it possible quickly to determine the substance adsorbed in the porous body. Herefrom it is then possible to determine the curve for the distribution of the volume of the pores over their effective radii. The authors thank I. V. Radushkevich for his interest in this investigation.

Card 2/3

The Reduction of the Melting Temperature of Water in the Capillaries of a Porous Body SOV/20-125-4-40/74

There are 3 figures and 8 references, 2 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov). Institut fizicheskoy khimii Akademii nauk SSSR (Institute of Physical Chemistry of the Academy of Sciences, USSR)

PRESENTED: December 24, 1958, by M. M. Dubinin, Academician

SUBMITTED: December 17, 1958

Card 3/3

S/076/60/034/008/014/014  
B015/B054

AUTHOR: Bakayev, V. A. (Moscow)

TITLE: Calorimeter With Steady Heat Flow and Automatic Compensator

PERIODICAL: Zhurnal fizicheskoy khimii, 1960, Vol. 34, No. 8, pp. 1875-1878

TEXT. In measurements of the specific heat of adsorbents saturated with the adsorbate, the specific heat rises considerably near the melting point (refs. 1,2). To investigate this phenomenon, i.e. anomalies of the specific heat in phase transformations, it is necessary to use a calorimeter with continuous heating. An instrument of this type (Fig. 1) is described in the present paper. The specific heat is proportional to the temperature difference on a heat insulation layer (of bismuth) round the sample during the continuous heating of the calorimeter. To avoid errors of measurement due to thermal inertia, the calorimeter is heated very slowly ( $2 \cdot 10^{-3}$  degrees/sec). The heating elements are fed

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S/076/60/034/COB/014/014  
B015/B054

Calorimeter With Steady Heat Flow and Automatic Compensator

by ЗСТ-98 (ZST-98) storage batteries. As the bismuth layer has a high thermal conductivity, the heating rate is low, and the thermal electromotive force on the battery of differential thermocouples is therefore very small, the author developed a particularly sensitive automatic compensation scheme (Fig. 3). The zero instrument used is an M21/5 (M 21/5) galvanometer, the electromotive force being recorded by an electronic ЭПП-09 (EPP-09) potentiometer with a sensitivity of  $2 \cdot 10^{-9}$  v. The photorelay used contained СВБ-3 (STsV-3) photocells. If an increased accuracy of measurement is to be attained, the bismuth layer must be substituted by a less heat-conducting material. The calorimeter is specially suited for investigations of phase transformations of the second order in the temperature range between  $-150^{\circ}$  and  $+100^{\circ}$ C. Finally the author thanks L. V. Radushkevich, V. F. Kiselev, and K. G. Krasil'nikov for advice given. There are 3 figures and 4 references.

3 Soviet and 1 US.

Card 2/3

Calorimeter With Steady Heat Flow and  
Automatic Compensator

S/076/60/034/008/014/014  
B015/B054

ASSOCIATION: Akademiya nauk SSSR, Institut fizicheskoy khimii  
(Academy of Sciences of the USSR, Institute of Physical  
Chemistry)

SUBMITTED: February 12, 1960



Card 3/3

BAKAYEV, V.A., starshiy nachny sotrudnik

First Congress of the International Council of Construction. Izv.  
ASIA no.4:164-168 '59. (MIRA 13:6)

1. Otdel vneshnikh snosheniy Akademii stroitel'stva i arkhitektury  
SSSR.

(Building--Congresses)

BAKAYEV, V.A.; BOBKOV, A.S.

First Congress of the International Council on Construction.  
Prom.stroi. 38 no.1:63-64 '60. (MIRA 13:5)  
(Rotterdam--Building--Congresses)

ACC NR: AF7012/32

SOURCE CODE: UR/0062/66/000/010/1869/1869

AUTHOR: Bakayev, V. A.; Dubinin, M. M.

ORG: Institute of Physical Chemistry, AN SSSR (Institut fizicheskoy khimii AN SSSR)

TITLE: Nuclear magnetic resonance signal of lithium in dehydrated synthetic zeolite

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 10, 1966, 1869

TOPIC TAGS: ion exchange, nuclear magnetic resonance, lithium, zeolite

SUB CODE: 07,08

ABSTRACT: The authors present the nuclear magnetic resonance signal for two specimens of LiA zeolite produced by ion exchange from NaA zeolite synthesized in different laboratories. The degrees of ion exchange were 98.7 and 98.3% respectively. The specimens were pressed at 780 atm into tablets 8 mm in diameter and dried in vacuum for ten hours at 430°C. The resultant NMR signal, which was identical for both specimens, is shown in the figure. The signal was taken at room temperature on a frequency of 18.3 Mc with a modulation frequency of 180 cps and a synchronous detector time constant of 9 sec. The authors thank V. BOSACHEK and V. Y. SERPINSKIY for assistance.

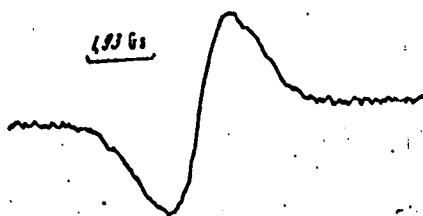
Card 1/2

UDC: 541.183+538.27

0932 1378



ACC NR: AP7012432



Orig. art. has: 1 figure. [JPRS: 40,422]

0/2

BAKAYEV, V.

Classifying sea communications according to the line system of  
organizing shipping. Mor.flot 7 no.3:7-12 Mr '47. (MLRA 9:5)  
(Steamboat lines)

BAKAYEV, V.

From the history of the U.S.S.R. merchant marine. Mor.flot 7  
no.8:44-46 Ag '47. (MIRA 9:6)  
(Merchant marine--History)

RAKAYEV, V.

From the history of the U.S.S.R. merchant marine. Mer. flot 7 no.9:  
43-46 S '47. (MIRA 9:6)  
(Merchant marine--History)

PAKAYEV, V.

From the history of the Russian merchant marine. Mor.flot 7 no.11:  
46-48 H '47. (MIRA 9:6)  
(Merchant marine--History) (Trade routes)

BARDIN, I.P., akademik, glavnyy red.; KORT, V.G., prof., otvetstvennyy red. vypuska; AFANAS'YEV, A.A., red.; BAKAYEV, V.G., red.; BURKHANOV, V.F., red.; ZOLOTUKHIN, A.A., red.; SOMOV, M.N., red.; FROLOV, V.V., red.; SHCHERBAKOV, D.I., akademik, red.; MIRONENKO, Z.I., red.; BRAYNINA, M.I., takhn.red.

[Hydrological, hydrochemical, geological, and biological studies on the diesel-electric research ship "Ob", 1955-1956] Gidrologicheskie, gidrokhimicheskie, geologicheskie i biologicheskie issledovaniia; diesel'-elektrokhod "Ob'," 1955-1956 gg. (MIRA 12:2)

1. Akademiya nauk SSSR. 2. Zamestitel' nachal'nika Kompleksnoy antarkticheskoy ekspeditsii Akademii nauk SSSR; nachal'nik 1-go reysa morskoy chasti kompleksnoy antarkticheskoy ekspeditsii Akademii nauk SSSR (for Kort). 3. Nachal'nik Gidrograficheskogo upravleniya Glavsevmorputi Ministerstva morskogo flota SSSR (for Afanas'yev). 4. Ministr Morskogo flota SSSR (for Bakayev). 5. Zamestitel' nachal'nika Gidrograficheskogo upravleniya Glavsevmorputi Ministerstva morskogo flota SSSR (for Burkhanov). 6. Nachal'nik Glavnogo upravleniya Gidrometeorologicheskoy sluzhby SSSR (for Zolotukhin). 7. Nachal'nik Kompleksnoy antarkticheskoy ekspeditsii Akademii nauk SSSR (for Somov). 8. Direktor Arkticheskogo nauchno-issledovatel'nogo instituta Gidrograficheskogo upravleniya Glavsevmorputi (for Frolov).

(Antarctic regions)

BAKAYEV, V.

Development of marine transport during the sixth five-year plan. Mor.  
flot.16 no.3:1-5 Mr '56. (MLF: 9:7)

1.Ministr morskogo flota.  
(Shipping) (Merchant marine)

BAKAYEV, Viktor Georgiyevich; VORONKOV, A.V., red.; DIZHUR, I.M., red. izd. va;  
LAVRENOVA, N.B., tekhn. red.

[The Soviet merchant marine during the last 40 years] Morskoi transport  
SSSR za 40 let. Moskva, Izd-vo "Morskoi transport," 1957. 201 p.  
(MIRA 11:1)

(Merchant marine)



BARDIN, I.P., akademik, glavnyy red.; KORT, V.G., otv.red.vypuska;  
AFANAS'YEV, A.A., red.; BAKAYEV, V.G., red.; BURKHANOV, V.F.,  
red.; ZOLOTUKHIN, A.A., red.; SOMOV, M.M., red.; FROLOV, V.V.,  
red.; SHCHERBAKOV, D.I., akademik, red.; MIRONENKO, Z.I.,  
red.; BRAYNINA, M.I., tekhn.red.

[Aerological and meteorological studies of the diesel electric  
ship "Ob'," 1955-1956] Aerologicheskie i meteorologicheskie  
issledovaniia; diesel'-elektrokhod "Ob'," 1955-1956 gg. Lenin-  
grad, Gidrometeorologicheskoe izd-vo, 1958. 216 p. (MIRA 12:6)

1. Morskaya antarkticheskaya ekspeditsiya na diesel'-elektrokhode  
"Ob'," 1955-1956. 2. Zamestitel' nachal'nika Kompleksnoy ant-  
arkticheskoy ekspeditsii Akademii nauk SSSR (for Kort). 3. Na-  
chal'nik Glavnogo upravleniya Severnogo Morskogo Puti Ministerstva  
morskogo flota (for Afanas'yev). 4. Minister Morskogo flota (for  
Bakayev). 5. Zamestitel' nachal'nika Glavnogo upravleniya Severnogo  
Morskogo Puti Ministerstva morskogo flota (for Burkhanov).  
6. Nachal'nik Glavnogo upravleniya Gidrometeorologicheskoy sluzhby  
SSSR (for Zolotukhin). 7. Nachal'nik Kompleksnoy antarkticheskoy  
ekspeditsii Akademii nauk SSSR (for Somov). 8. Direktor Arkti-  
cheskogo nauchno-issledovatel'skogo instituta Glavnogo upravleniya  
Severnogo Morskogo Puti (for Frolov).

(Antarctic regions--Meteorology--Observations)

BARDIN, I.P., akademik, glavnyy red.; KORT, V.G., prof., otv.red.; AFANAS'YEV, A.A., red.; BAKAYEV, V.G., red.; BURKHANOV, V.F., red.; ZOLOTUKHIN, A.A., red.; SOMOV, M.M., red.; FROLOV, V.V., red.; SHCHERBAKOV, D.I., red.; SPRYGINA, L.I., red. isd-va; SHOKHET, B.S., red. isd-va; KASHINA, P.S., tekhn.red.

[Description of the expedition on board the diesel ship "Ob", 1955-1956] Opisanie ekspeditsii na diesel'-elektrokhode "Ob", 1955-1956 gg. Moskva, 1958. 237 p. (MIRA 12:1)

1. AN SSSR. 2. Nachal'nik I reysa morskoy antarkticheskoy ekspeditsii AN SSSR (for Kort). 3. Nachal'nik Glavsevmorputi Ministerstva morskogo flota SSSR (for Afanas'yev). 4. Ministr morskogo flota SSSR (for Bakayev). 5. Zamestitel' nachal'nika Glavsevmorputi (for Burkhanov). 6. Nachal'nik Glavnogo upravleniya Gidrometsluzhby (for Zolotukhin). 7. Nachal'nik Kompleksnoy antarkticheskoy ekspeditsii (for Somov). 8. Direktor Arkticheskogo n.-i. instituta Gidrograficheskogo upravleniya Glavsevmorputi (for Frolov). 9. Predsedatel' Soveta po antarkticheskim issledovaniyam AN SSSR (for Shcherbakov).  
(Antarctic regions)

POVOROZHENKO, Vladimir Vasil'yevich, prof., doktor tekhn.nauk;  
KOSTENKO, Ivan Georgiyevich, kand.tekhn.nauk; MAKHOTKIN,  
Nikolay Aleksandrovich, insh.; RUMYANTSEV, Sergey Mikhay-  
lovich, insh.; PARAKHONSKIY, Boris Mikhaylovich, kand.ekon.  
nauk; SOLOV'YEV, Ivan Fomich, kand.tekhn.nauk; BAKAYEV,  
V.G., doktor tekhn.nauk, red.; CHIRNOMERDIK, G.I., doktor  
tekhn.nauk, nauchnyy red.; IRKHIN, A.P., kand.tekhn.nauk,  
nauchnyy red.; KUDRYAVTSEV, A.S., doktor ekon.nauk, nauchnyy  
red.; GLADTSINOV, B.M., kand.tekhn.nauk, nauchnyy red.;  
BYGKL', I.Yu., red.; LAVRENOVA, N.B., tekhn.red.

[Transportation in the U.S.S.R.] Transport SSSR. Pod  
obshchei red. V.G.Bakaeva. Moskva, Izd-vo "Morskoi transport,"  
1960. 536 p. (MIRA 13:7)

(Transportation)

GUREVICH, Georgiy Yefimovich; BAKAYEV, V.G., nauchnyy red.; FEDOROV, V.P.,  
red.; LAVRENOVA, N.B., tekhn. red.

[Organization of the work of the merchant marine] Organizatsiia raboty  
morskogo flota. 2. perar.izd. Moskva, Izd-vo "Morskoi transport,"  
1961. 352 p. (MIRA 14:12)

(Merchant marine)

VISHNEPOL'SKIY, S.A., kand. ekon. nauk; BAYEV, S.M., inzh. putey soob-  
 shehoniya; BONDARENKO, V.S.; RODIN, Ye.D.; CHUVLEV, V.P.;  
 TURETSKIY, L.S.; SMIRNOV, G.S.; SHAPIROVSKIY, D.B.; OBERMEYSTER,  
 A.M.; SINITSIN, M.T.; KOGAN, N.D.; PETRUCHIK, V.A.; GRUNIN, A.G.;  
 KOLESNIKOV, V.G.; MARTIROSOV, A.Ye.; KROTKIY, I.B. [deceased];  
 ZENEVICH, G.B.; MEZENTSEV, G.A.; KOLOMOYTSSEV, V.P., kand. tekhn. nauk;  
 ZAMAKHOVSKAYA, A.G., kand. tekhn. nauk; MAKAL'SKIY, I.I., kand.  
 ekon. nauk; MITROFANOV, V.F., kand. ekon. nauk; CHILIKIN, Ya.A.;  
 BAKAYEV, V.G., doktor tekhn. nauk, red. Prinsipali uchastiye:  
 DZHAVAD, Yu.Kh., red.; GUBERMAN, R.L., kand. ekon. nauk, red.;  
 RYABCHIKOV, P.A., red.; YAVLENSKIY, S.D., red.; BAYRASHEVSKIY,  
 A.M., kand. tekhn. nauk, red.; POLYUSHKIN, V.A., red.; BALANDIN,  
 G.I., red.; ZOTOV, D.K., red.; RYZHOV, V.Ye., red.; BOL'SHAKOV, A.N.,  
 red.; VUL'FSON, M.S., kand. ekon. nauk, red.; IMTRIYEV, V.I., kand.  
 ekon. nauk, red.; ALEKSANDROV, L.A., red.; LAVRENOVA, N.B., tekhn.  
 red.

[Transportation in the U.S.S.R.; marine transportation] Transport  
 SSSR; morskoi transport. Moskva, Izd-vo "Morskoi transport,"  
 1961. 759 p. (MIRA 15:2)

(Merchant marine)

BAKAYEV, V.G.

A well coordinated work is the basis of the merchant marine  
and railroad operations. Zhel.dor.transp. 44 no.11:10-19  
N '62. (MIRA 15:11)

1. Ministr morskogo flota SSSR.  
(Freight and freightage) (Merchant marine) (Railroads)

BAKAYEV, V.G., doktor tekhn.nauk

The U.S.S.R. merchant marine is growing. Mor. sbor. 46 no.7:  
19-27 J1 '69. (MIRA 16:11)

1. Ministr Morskogo flota SSSR.

BAIYEV, V. I. (ed.). *World shipping and sea transportation in capitalist countries; notes for the development of a long-term program for the expansion of the U.S.S.R. merchant marine*; [Mirnoye razvitiye i morskoi transport kapitalisticheskikh stran; zashchki k razrab. te. perspektivnogo plana razvitiia morskogo flota SSSR. Moskva, Izd-vo "Transport," 1964. 43 p. (MIRA 17:8)



BUTOMA, B.Ye.; YEGOROV, M.Ye.; DEREVIYANKO, Yu.G.; KHABAKHPASHV, A.A.;  
BAKAYEV, V.G.; ISHKOV, A.A.; KOLFSNICHENKO, N.S.; KAMENTS'EV, V.M.;  
GORSHKOV, S.G.; KASATONOV, M.A.; ISHCHEKOV, N.V.; AFANAS'YEV, S.A.;  
TITOV, G.A.; LARIONOV, M.F.

Boris Fygen'evich Klopotov; obituary. Sudostroenie 30  
no.11:81 '64. (MIRA 18:3)



BAKAYEV, Viktor Georgiyevich, doktor tekhn. nauk; LOBIN, Ye.I.,  
kand. ekon. nauk, náuchn. red.; KRUGLOVA, Ye.M., red.

[Operation of the merchant marine] Eksploatatsiya morskogo flota. Moskva, Transport, 1965. 559 p.

(MIRA 18:12)

1. Ministr Morskogo flota SSSR (for Bakayev).

ACC NR: AM6003320 (A)

Monograph

UR/

Bakayev, Viktor Georgiyevich (Doctor of Technical Sciences)

Operation of the merchant marine (Ekspluatatsiya morskogo flota)  
Moscow, Izd-vo "Transport," 1965. 559 p. illus., biblio.,  
tables. Errata slip inserted. 10,000 copies printed.

TOPIC TAGS: merchant marine status, maritime radio, cargo ship, ship navigation

PURPOSE AND COVERAGE: This book is for training engineers in the merchant marine. It may be used as a textbook in the study of the economics and organization of merchant marine operations. It may also be of interest to personnel concerned with the economics and operation of marine and other types of transportation. In addition to covering the subject matter of a course in the organization of merchant marine operations, offered at naval schools of higher education, the book deals with the scientific, technical, and maintenance problems connected with the merchant marine. Based on the most recent Soviet and non-Soviet scientific achievements, as well as the wide experience of the author, the principles affecting the organization and efficiency of marine cargo and passenger transportation are

Card 1/3

UDC: 656.612.004(075.8)

ACC NR: AM6008328

discussed. Special attention has been paid to the planning of shipping abroad and to operations in foreign waters.

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Pt. VII. Traffic organization and technical planning of merchant marine operations -- 310

Pt. VIII. Optimum planning of transportation and the operation of the merchant marine -- 418

Card 2/3

ACC NR: AM6008328

Pt. IX. Economical-exploitation basis of new types of merchant  
marine vessels -- 514

SUB CODE: 13,17 / SUBM DATE: 29Nov65/ ORIG REF: 126/

Card 3/3

USSR/Engineering - Machine Tools

Card 1/1

Author : Bakaev, V. I.

Title : Quick-change chuck

Periodical : Stan. i instr. 24/4, 34, April 1953

Abstract : A. P. Savenkova designed a quick-change chuck for drill presses. All that is necessary to release a drill, tap, reamer, etc. is to take hold of the cap of the chuck while the machine is in motion.

Institution : ....

Submitted : ....

BAKAYEV, V.I.

Jaws for automatic gripping of parts during milling. Stan.1 instr. 24 no.  
10:35 0 '53. (MIRA 6:11)  
(Milling machines)



BAKAYEV, V.I.

Device for machining parts with a threaded surface. Stan.1 instr. 24  
no. 1:29 N '53. (MLRA 6:12)  
(Machine tools)

PA 241147

BAKAYEV, YU. N.

USSR/Mathematics - Pendulum

Nov/Dec 52

"Approximate Integration of the Differential Equation of the Pendulum," Yu. N. Bakayev, Moscow

"Priklad Matemat i Mekhan" Vol 16, No 6, pp 723-728

States that analysis of some automatic regulation schemes lead to the following system:  $dv/dt = u + b$ ,  $a^2 du/dt = -\sin v - u$  ( $a, b$  are constants), which can be reduced to the familiar eq for the pendulum  $d^2v/dt^2 + a dv/dt + \sin v = b$ . This eq has been well studied from the qualitative viewpoint (phase trajectories). Conducts a quantitative analysis. Submitted 5 May 52.

241167

BARAYEV, YU.N.

SUBJECT USSR / PHYSICS  
 AUTHOR BAKAEV, JU.N., KUZNECOV, P.I. CARD 1 / 2 PA - 1590  
 TITLE The Mean Value Method and its Application to Some Nonlinear Tasks  
 in Radio Engineering.  
 PERIODICAL Radiotekhnika, 11, fasc.10, 3-12 (1956)  
 Issued: 11 / 1956

The generalization of the mean value method and its full mathematical foundations were given by N.N. BOGOLJUBOV (1945). A form, into which the initial differential equations of the system are put, takes up a certain space in his theory. These

systems have the form  $\frac{dx_1}{dt} = \xi X_1(t, x_1, x_2, \dots, x_n)$ ,  $i = 1, 2, \dots, n$   
 $\xi$  is the "small parameter". In the further course, and if nothing special is mentioned, only a differential equation of the first order:

$$\frac{dx}{dt} = \xi X(t, x)$$

is mentioned. BOGOLJUBOV generalized the procedure to a considerable extent and defined averaging as follows:

$$X_0(x) = \lim_{T \rightarrow \infty} \frac{1}{T} \int_0^T X(t, x) dt$$

In this form it can be applied to non-periodic functions and even to functions that have no oscillation properties. BOGOLJUBOV proved several theorems which belong to the most interesting cases found in practice. From these it follows

BAKAEV, YU N

SUBJECT USSR / PHYSICS CARD 1 / 2 PA - 1706  
AUTHOR BAKAEV, JU.N., KUSNEZOV, F.I.  
TITLE On the Determination of the Domain of the Stable Operation of an  
Inertial System of Television Synchronization.  
PERIODICAL Radiotekhnika, 11, fasc. 11, 17-24 (1956)  
Issued: 12 / 1956

The stability of the synchronizing inertial device is investigated which was dealt with by the works by G.V.KIJAKOVSKIJ (Radiotekhnika, 6, fasc.6, 1951). The block scheme of this system is described as well as the differential equations belonging to this system. These equations are nonlinear, and for their solution the averaging method is employed. It is pointed out that KIJAKOVSKIJ assumed that the voltage on the collecting capacity in the intervals between the synchronizing impulses does not change. This assumption leads to errors. He made the concrete statement that the regulating voltage on the net of the reaction tube appeared to be independent of the porosity of the synchronizing impulse signals. In reality, however, such a dependence exists. In close connection herewith is also the selection of a wrong scheme of investigation. KIJAKOVSKIJ replaces the phase detector by a source of electro-motoric force without any inner resistance and by an integrating RC chain, which is supposed not to exercise any reaction on the phase detector and on the voltage generated by it. In order to bring the conditions of analysis into line with the experiment, KIJAKOVSKIJ introduces a cathode repeater into

Radiotekhnika, 11, fasc. 11, 17-24 (1956) CARD 2 / 2

PA - 1706

the experimental scheme. However, he disregards the fact that the latter eliminates the reaction of the RC chain on the detector which is of essential importance for the entire investigation. In practical schemes a cathode repeater is not necessary nor is it ever used. As a special case the phenomenon of a partial and total shifting of frequency in the system is dealt with. Next, the aperiodic state in the system is investigated. Low values of the coefficient

$\gamma^2 \beta^2 = \Delta(\omega, RC)$  ( $\omega_1$  is a frequency) correspond to the high degree of

extinction in the system. For the solution of the system of equations with small multipliers the method of the small parameter is usually employed. As a relation may easily be established between this method and that of averaging, the method of the small parameter is somewhat modified on this basis.

Finally, the limiting cycle and the conditions for their existence are determined by means of this method. From what has been said it may be seen that a limit for the disturbance of the device exists and that it cannot be exceeded.

INSTITUTION:

AUTHOR: Bakayev, Yu.N.

109-3-2-9/26

TITLE: Investigation of the Integrating System of Television Synchronisation (Issledovaniye inertsionnoy sistemy televizionnoy sinkhronizatsii)

PERIODICAL: Radiotekhnika i Elektronika, 1958, vol.III, No.2, pp. 227 - 236 (USSR).

ABSTRACT: The standard pulse-type synchronisation of the television raster is deficient in that it is comparatively sensitive to interference. This deficiency is reduced in the integrating-type synchronisation, in which the synchronising signal is averaged over several tens of periods. The system normally consists of an integrating (averaging) phase detector, a controlled element and a time-base generator (see Fig.1). The circuit diagram of a phase-detector is shown in Fig.2. By analysing the circuit, it is shown that its operation can be described by:

$$C \frac{du_c}{dt} + \frac{1}{R_1} \left( \bar{r}C \frac{du_c}{dt} + u_c \right) = i_1 - i_2 \quad (1)$$

$$\omega - \omega_0 = \pm a \left( \bar{r}C \frac{du_c}{dt} + u_c \right) \quad (2)$$

Card1/4

109-3-2-9/26

## Investigation of the Integrating System of Television Synchronisation

where  $\omega_0$  is the natural frequency of the time base, i.e. its frequency in the absence of any voltage at the grid of the controlling reactance tube;  $\omega$  is the instant frequency of the time base,  $a$  is a coefficient. Eq.(2) can be written as Eq.(3), where  $\varphi$  is the phase difference and  $\Delta\omega_0$  is the initial frequency difference. By averaging Eqs.(1) and (3) over a period  $T$ , it is possible to write them in the form of Eqs.(4). From these, it follows that the synchronisation equation of the system is:

$$\frac{d^2\varphi}{dx^2} + \alpha \left[ 1 + \lambda \frac{df}{d\varphi} \right] \frac{d\varphi}{dx} + f(\varphi) = \beta \quad (6)$$

where

$$v = \frac{u_c}{U \frac{t}{T}} ; \quad \Delta\omega_1 = aU \frac{t}{T} ; \quad \tau = \Delta\omega_1 t ; \quad \frac{1}{\alpha^2} = \Delta\omega_1 RC ;$$

Card2/4

109-3-2-9/26

Investigation of the Integrating System of Television Synchronisation

$$\lambda = \Delta\omega_1 rC ; \quad \beta = \frac{\Delta\omega_0}{\Delta\omega_1} ,$$

and  $x = \alpha \tau$  ;  $t_M$  is the length of the synchronising pulse and  $R = r + R_2 + R_3 + R_1$  , where  $R_1$  is the internal resistance of a rectifier diode. If  $f(\varphi) = \sin \varphi$  , the synchronisation equation can be written in the form of Expression (7). From Expression (7), it is shown that the synchronisation bandwidth of the system can be expressed by Eq.(10), provided the initial de-tuning of the system fulfils the condition:

$$\Delta\omega_0 < \frac{4}{\pi} \sqrt{\frac{\Delta\omega_1}{RC}} (1 + \Delta\omega_1 rC).$$

If the synchronisation function is in the form of a saw-tooth wave-form, as expressed by Eqs.(11) and illustrated in Fig.6, the system is capable of being synchronised provided it fulfils the condition expressed by Eq.(12); this condition implies the absence of the limit cycles of the second kind. The effect

Card3/4



109-3-2-9/26

Investigation of the Integrating System of Television Synchronisation

of noise on the synchronisation is considered and it is shown that the overall error of the system is given by Eq.(15), from which it follows that the minimum error is given by Eq.(16). It is also shown that the transient time of the system  $t_y$

can approximately be expressed by the equation on p.255. The expressions derived can be employed in the design of practical phase-detector systems. The paper contains three appendices: the first of these deals with the calculation of the integral in Equation (4); the second is concerned with the investigation of the limit cycles of the second kind for Eq.(7) and the third determines the limit cycles for the synchronisation equation when  $f(\varphi)$  is in the shape of a saw-tooth waveform. There are 9 figures and 9 references, 7 of which are Russian and 2 English.

SUBMITTED: June 8, 1956

AVAILABLE: Library of Congress

Card 4/4

1. Television-Synchronization 2. Mathematical analysis

B(5)

AUTHORS: Bakayev, Yu. N., Kuznetsov, P. I. (Moscow)

SOV/105-59-3-10/27

TITLE: On Problems in Starting Condition Calculation in Electric Drives With Direct Current Motor (K voprosu rascheta puskovykh rezhimov v elektroprivodakh s dvigatelyami postoyannogo toka)

PERIODICAL: Elektrichestvo, 1959, Nr 3, pp 47 - 50 (USSR)

ABSTRACT: The analytical investigation of the transient operation of direct current motor drives with an independent excitation can under some assumptions be reduced to the solution of a system of two linear first order differential equations with variable coefficients. In the paper (Ref 1) it was demonstrated that even in a relatively simple case a solution of the problem cannot be found. The computations are, however, considerably simplified if the inductivity of the armature circuit is ignored. Similar methods of solving this problem yielded satisfactory results in a number of cases. The problem under review in this paper is that of a quantitative estimation of the errors in the calculations by means of approximation formulas. The magnetic system of the motor is assumed

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On Problems in Starting Condition Calculation in Electric Drives With Direct Current Motor *SSN/00-99-3-10/27*

to be unsaturated. Hysteresis, the voltage drop at the brush contacts and the armature reaction are ignored. A system of equations (1), (2), and (3) describing the transient starting processes in the drive unit is written down. The excitation current  $i_E$  in (2) and (3) is taken to be a known function of time. If the time constant of the armature circuit is small as compared to the other time constants involved,  $i_E$  and  $\omega(t)$  vary very slowly as compared to  $i_{\text{armature}}(t)$ . Hence, when integrating (2),  $i_E(t)$  and  $\omega(t)$  may be considered constant. Equation (4) is deduced if it is integrated under the same assumptions as above, namely, that  $i_E$  and  $\omega$  do not depend upon time, we arrive at formula (6) for the armature current. Subsequently equation (8) is obtained, giving the speed  $\omega$  of the electro-motor. Relations analogous to equation (9) have been presented in the paper cited by reference 7. They are usually obtained by setting the inductivity of the armature circuit  $L_A = 0$  right at the beginning in formula (2).

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On Problems in Starting Condition Calculation in Electric Drives With Direct Current Motor

If this is done, the terms  $I(0)\exp(-a\tau)$  in equation (6) and  $I(0)i_E\exp(-a\tau)$  in equation (8) are missing. The applicability limits of these equations have not yet been determined. It is shown that the error in using equation (8) amounts to

$$\Delta\omega \ll \sqrt{\frac{T_A}{T_m}}, \text{ where } T_A \text{ is the time constant of the armature}$$

circuit and  $T_m$  the electromechanical time constant. It is demonstrated that by the inclusion of the terms  $I(0)\exp(-a\tau)$  in the equations (4) and (6), this method of approximative integration exhibits certain advantages. It is further shown that the relative error in the determination of the armature current according to formula (6) can be estimated according to formula (10). Relation (11) shows that this error is not only dependent upon the ratio between the time constant of the armature circuit and of the electromechanical time constant, but also upon the ratio

Card 3/4

$\frac{T_A}{T_{Err}}$ . These estimations apply in the case of motor starting

On Problems in Starting Condition Calculation in Electric Drives With Direct Current Motor 007/103-59-3-10/27

and braking. For rotation inversion the corresponding values must be doubled. The estimations advanced in this paper apply mostly to machines of medium power. If equations (9), (10), and (11) are used for midget motors, they lead to considerable errors. There are 8 Soviet references.

SUBMITTED: June 15, 1958

Card 4/4

~~66047~~ 69647

S/024/60/000/02/017/031

E140/E135

2P/000

AUTHOR: Bakayev, Yu.N. (Moscow)

TITLE: ~~Plotting the~~ Operating Zones of an Automatic Phase Control System

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Energetika i avtomatika, 1960, Nr 2, pp 132-136 (USSR)

ABSTRACT: The stability of automatic phase control systems has been previously studied either in the linear approximation or with regard to systems of not higher than second order. The present article obtains results specifically for third-order systems but the method of solution is presented in a form permitting solution of the general case. The basic assumptions of the method are as follows.  
1) The system coefficients are constant. 2) The system function is single-valued, continuous, periodic and satisfying the Lipshits condition. 3) The system determinant does not vanish, which guarantees that the system of equations has a unique solution. 4) The system parameters and the function  $f(x_1)$  are such that the equation  $f(x_1) - z = 0$  in a certain region of  $x_1$  has two real distinct roots. Then stable solutions alternate with unstable. Further, the system is analysed by the

Card  
1/2

66047 69647

S/024/60/000/02/017/031

E140/E135

Plotting the Operating Zones of an Automatic Phase Control System

Lyapunov method. This permits better utilisation of possible systems. The graphical solution (Fig 2) permits finding the maximum admissible deviation of the system with maximum detuning between the natural frequency of the system and the required frequency. There are 2 figures and 3 references, of which 2 are Soviet and 1 is Czech. H

Card  
2/2

SUBMITTED: December 22, 1959

BAKAYEV, Yu.M.; KUZNETSOV, P.I.

Comparative investigation of consecutive and parallel methods of  
frequency division. Radiotekhnika 15 n.4:42-49 Ap '60.

(MIRA 13:6)

1. Doystritel'nyye chleny Nauchno-tekhnicheskogo obshchestva radio-  
tekhniki i elektrosvyazi imeni A.S.Popova.  
(Frequency changers)



S/024/62/000/006/012/020  
E140/E135

AUTHOR: Bakayev, Yu.N. (Moscow)

TITLE: Investigation of the stability of inertial  
synchronisation systems

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye  
tekhnicheskikh nauk. Energetika i avtomatika, no.6,  
1962, 128-132

TEXT: The article concerns the type of "flywheel"  
synchronisation system used in television receivers and similar  
equipment. In the mathematical sense there are an infinite number  
of modes in which such systems can establish synchronism. The  
note derives stability conditions for such systems with delay.  
It is remarked that Lyapunov's method cannot be applied, since it  
is applicable only to systems with unique stable modes. It is  
found that the capture band of such systems is narrower than the  
associated filter passband, a result which is evident from  
physical considerations. There are 3 figures.

Card 1/1 SUBMITTED: November 21, 1961

S/024/62/000/006/015/020  
E140/E135

AUTHOR: Bakayev, Yu.N. (Moscow)

TITLE: On a possible method of improving the dynamic properties of automatic control systems

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye tekhnicheskikh nauk. Energetika i avtomatika, no.6, 1962, 144-145

TEXT: The problem is to obtain the most rapid damping of a certain positive-definite function of the system. As examples, a second-order linear system with constant parameters and a television synchronisation system are investigated. In the latter example a proportional integrating filter is automatically introduced into the system, the advantage of which is known. There is 1 figure.

SUBMITTED: January 3, 1962

Card 1/1

41101

S/103/62/023/009/002/007  
D201/D308

64070

AUTHOR: Bakayev, Yu. N. (Moscow)

TITLE: Analysis of dynamic and statistical properties of a phase system of AFC with quadratic and combined damping

PERIODICAL: Avtomatika i telemekhanika, v. 23, no. 9, 1962, 1179-1185

TEXT: The author considers a typical circuit of a phase AFC system, consisting of a phase detector with an RC filter (sensing element), a reactance tube (controlling element), a generator (integrator) and a feedback circuit. For such a system the stability regions are determined together with the duration of transients for linear and combined linear-quadratic damping by means of asymptotic solution of the Fokker-Planck equation with small parameters. The analysis shows that the quadratic damping is to be preferred for large phase deviations and linear damping for small phase deviations. It is also shown that, if the signal-to-noise

Card 1/2

Analysis of dynamic ...

S/103/62/023/009/002/007  
D201/D308

ratio, referred to the input of the AFC system, is less than unity, the linear damping is to be preferred and when it is larger than 1, the quadratic damping gives better results. There are 3 figures.

SUBMITTED: January 3, 1962

Card 3/2

S/280/63/000/001/014/016  
E140/E435AUTHOR: Bakayev, Yu.N. (Moscow)TITLE: The effect of delay on the conditions of synchronization  
in automatic phase control systemsPERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye  
tekhnicheskikh nauk. Tekhnicheskaya kibernetika.  
no.1, 1963, 139-143

TEXT: The shape of the region of stability of an automatic phase control system described by a nonlinear second order differential equation with delayed argument is found. Generalizations of the method are possible. The solution is obtained by the method of functionals, using a functional due to N.N.Krasovskiy (Nekotoryye zadachi teorii ustoychivosti dvizheniya - Certain problems in the theory of stability of motion - Fizmatgiz, 1959):

$$V = \int_{x_0}^x f(x) dx + y^2/2 + \frac{\alpha_0}{2h} \int_{-h}^0 d\tau \int_{t+\tau}^t y^2(v) dv \quad (4)$$

There is 1 figure.  
Card 1/1

SUBMITTED: January 3, 1962

BAKAYEV, Yu.N.

Stability and dynamic properties of an astatic automatic phase  
frequency trim system. Radiotekhn. i elektron. 8 no.3:513-516  
Mr '63. (MIRA 16:3)  
(Automatic control) (Frequency regulation)

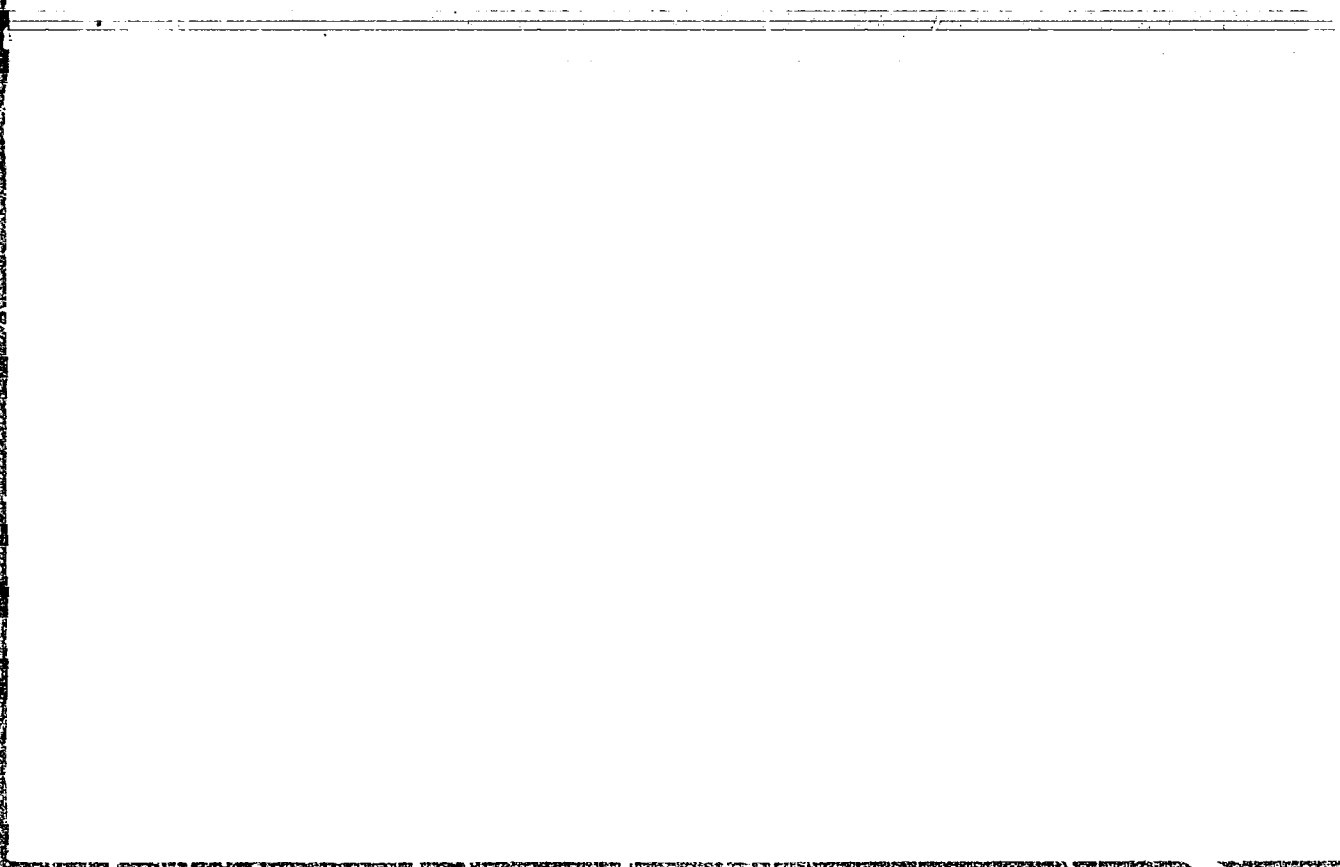
IN THE CASE OF A SYSTEM WITH A SINGLE STATION

frequency fluctuation due to the relative motion of the stations. As the system

periodization of the system  $V$ -function. It is also demonstrated that a simple

"APPROVED FOR RELEASE: 06/06/2000

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APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000103110001-4"



ACCESSION NR: AP4018059

S/0213/64/004/001/0145/0149

AUTHORS: Stas', I. I.; Ishutin, A. G.; Bakayeva, G. A.

TITLE: On the problem of investigation of long waves

SOURCE: Okeanologiya, v. 4, no. 1, 1964, 145-149

TOPIC TAGS: storm location, ocean wave, storm forecasting, Van Dorn wavegraph, coastal weather station, hydraulic filter, Esterline Angus register, Graafen oceanograph, manometer

ABSTRACT: The authors described the physical configuration of a long-period ocean wavegraph station and discussed qualitatively the methodology of sea-storm location by long-period wave measurement. A long-period wavegraph station was built on the island Kunashir of the South Kurile group. A schematic diagram of the station is shown in Fig. 1 on the Enclosure; the system is named for Van Dorn. Hydraulic pressure differences were relayed through a submerged hose to a hydraulic filter manometric device. The pressure differences were then converted into electric signals and recorded on a time-pressure plot. The recording device used was an Esterline-Angus plotter. Calibration characteristics of the hydraulic filter were presented, along with a schematic diagram of the filter and typical

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ACCESSION NR: AP4018059

long-wave recordings made during trials. Results were compared with those of Yu. N. Sergeyev (1961, Opyt isucheniya voln bol'shikh periodov v more. Uch. zap. Leningr. un-ta, No. 309, Okeanologiya). The authors proposed further study of the joint use of the described stations with weather stations to improve storm prediction. Orig. art. has: 2 sketches, 1 graph, and 1 photograph.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 02

SUB CODE: ES

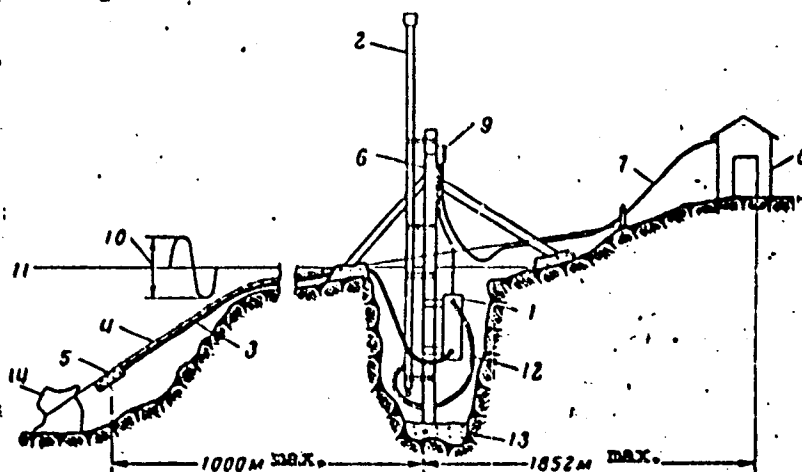
NO REF SOV: 001

OTHER: 000

Card 2/4

ACCESSION NR: AP4018059

ENCLOSURE: 01



General view of a long-period wavegraph station.  
(to card 4/4)

Card 3/4

ACCESSION NR: AP4018059

(from card 3/4)

ENCLOSURE: 02

1- protective cover and hydraulic filter; 2- brass vertical pipe;  
3- hose, suspended on a rope; 4- rope; 5- protecting screen; 6- support  
pipe; 7- four-strand cable; 8- place for recording apparatus; 9- electric  
cable connection; 10- tidal amplitude; 11- mean sea level; 12- hydraulic  
hose; 13- concrete; 14- rock

Card 4/4

BRAYTON, G. A.

"Descendants of the Potato Species *Solanum andigenum* Juz. et Nik. and Their Utilization for Selection." Cand Biol Sci, All-Union Inst of Plant Growing, All-Union Order of Lenin Academy of Agricultural Sciences imeni V. I. Lenin, Leningrad, 1955. (KL, No 16, Apr 55)

SO: Ser. No. 70h, 2 Nov 55 - Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (16).

БАКАЙКОВА, Н.

Every telephone operator can be progressive. Sov.sviat. 2 no.12:  
15 D '52. (MIRA 7:8)

1. Brigadir Kemerovskoy gorodskoy telefonnoy stantsii.  
(Telephone--Employee)

BAKAYEVA, N.N.

Bioflavin deficiency in chronic dysentery; clinical and laboratory findings. Sovet. med. No. 2:32-34 Feb 52. (CML 21:5)

1. Of the Clinical Division of Moscow Oblast imeni I.I. Mechnikov Institute of Epidemiology, Microbiology, and Infectious Diseases (Director--M.I. Sokolov).

BAKAYEVA, N.N.; KUZIN, V.I.

Phagocytic activity of blood leukocytes in dysentery in its dynamic stage; author's abstract. Zhur.mikrobiol.epid. i immun. 29 no. 2:116-117 F '58. (MIRA 11:4)

1. Iz Moskovskogo instituta vaktsin i syvorotok imeni Mechnikova.  
(DYSENTERY, BACILLARY, immunology,  
phagocytosis (Rus)  
(PHAGOCYTOSIS, in var. dis.  
dysentery, bacillary (Rus)



BAKAYEVA, N.N.; KUZIN, V.I.

Methods of diagnosis and recovery control in bacillary dysentery  
in adults. Sov. med. 24 no. 2:65-69 F '60. (MIRA 14:2)

1. Iz 2-y gorodskoy klinicheskoy infektsionnoy bol'nitsy (glavnyy  
vrach A.M. Pyl'tsova).

(DYSENTERY)

References:

- "Combined method of vaccination against typhoid," 1943, with K. V. Gordina.
- "Differentiation of para B groups," 1944 with K. V. Gordina.
- "Analysis of the strains of Paratyphus Group observed in the USSR. (para B and typhi-mutua), 1944 with K. V. Gordina.

Bakayeva, O. A., *Tr. I. I. I. and V. I. I.*, 1944, Moscow

ISPOLATOVSKAYA, M.V.; BAKAYEVA, O.A.; OSTROVSKAYA, N.N.

Electrophoretic and immunochemical study of the protein components of the blood serum in guinea pigs in the development of Brucella infection. Biol. eksp. biol. i med. 49 no.3:46-50 Mr '60.

(MIRA 14:5)

1. Iz otdela biokhimii i brutselleznoy laboratorii Instituta epidemiologii i mikrobiologii imeni N.F. Gamalei (dir. - prof. S.N.Miromtsev) AMN SSSR, Moskva. Predstavlena deystvitel'nykh chlenom AMN SSSR L.A.Zil'berom.

(BRUCELLOSIS)

(BLCOD PROTEINS)

BAKAYEVA, O.A.; OSTROVSKAYA, N.N.

Detection of Brucella antigen in the serum of experimental animals in the early period of the development of an infection. Zhur. mikrobiol., epid. i immun. 40 no.2:13-19 (MIRA 17:2) 1963.

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei AMN SSSR.

SAMSONOV, G.V.; YML'KIN, G.E.; KLIKH, S.F.; BAKAYEVA, R.M.; KARPENKO, M.P.

Selective sorption of vitamin B<sub>12</sub> in ionites. Med.prom. 14  
no.3:3-12 M<sup>r</sup> '60. (MIRA 13:6)

1. Leningradskiy khimiko-farmatsevticheskiy institut.  
(CYANOCOBALAMINE) (ION EXCHANGE)

S/000/63/025/002/002/010  
A057/A126

AUTHORS: Avetisyan, I.S., Bakayeva, T.V., Pospelova, K.A.

TITLE: On the stabilization of polystyrene latex by non-ionogenic emulsifiers

PERIODICAL: Kolloidnyy zhurnal, v. 25, no. 2, 1963, 143 - 145

TEXT: The emulsion polymerization of styrene was carried out with a mixture of technical grade non-ionogenic emulsifiers OP-10 (OP-10) and xylital C-15 (S-15). The latter is a surface-active substance obtained from xylite by introducing a stearic-acid radical and 15 hydroxyethyl groups. OP-10 has a much higher activity than xylital S-15. Surface tension measurements were carried out and it was observed that near-to-equilibrium values might be obtained not only by the stalagmometer, but also by the du Nouy method. Purification of the surface-active substances by means of electro dialysis did not change considerably the surface activity but decreased the pH. Therefore, non-dialyzed aqueous solutions were used for the polymerization experiments. However, a stable emulsion of the monomer was obtained only with OP-10, while a block polystyrene re-

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On the stabilization of polystyrene latex ....

S/069/62/025/002/002/010  
A057/A126

sulted from polymerization with xylital S-15. Thus polymerization was carried out with a mixture of xylital S-15: OP-10 = 4 : 1, styrene, and potassium persulfate. The mixture was initially heated to 80°C and by the exothermic reaction the temperature rose to 95°C. Polymerization was carried out under soft mixing for 3 h. The latex obtained showed high dispersity ( $r$  about 0.14), but  $pH = 4$ , apparently due to a partial saponification of xylital S-15. The dry residue of the latex was 31.4%, content of the monomer 2.8%. The latex showed high stability (without phase separation for 12 months) in storage. There is 1 figure.

ASSOCIATION: Institut fizicheskoy khimii AN SSSR, Moskva (Institute of Physical Chemistry of the AS USSR, Moscow)

SUBMITTED: October 9, 1961

Card 2/2

БАКАТОВА, В.

Efficient work in plants. NTO no.2:31-33 F '59.

(MIRA 12:2)

1. Uchenyy sekretar' pervichnoy nauchno-tekhnicheskogo obshchestva priborostroitel'noy promyshlennosti Kiyevskogo zavoda "Tochelektropribor."

(Kiev--Electric instruments)



ACC NR: AP6033274 SOURCE CODE: UR/0020/00/170/004/0000/00/1

AUTHOR: Bakayeva, V. P.; Yegorova, Z. S.; Karpov, V. L.

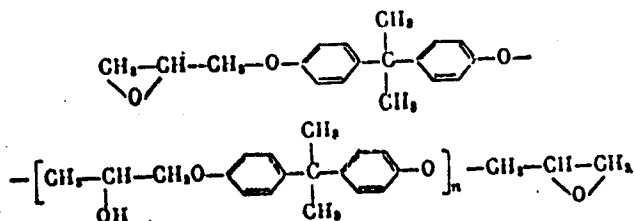
ORG: Institute of Physical Chemistry im. L. Ya. Karpov (Fiziko-khimicheskiy institut)

TITLE: The effect of ionizing radiation on epoxy resins

SOURCE: AN SSSR. Doklady, v. 170, no. 4, 1966, 368-871

TOPIC TAGS: ionizing radiation, epoxy plastic, mass spectrometry, electron paramagnetic resonance, isomerization

ABSTRACT: The authors study molecular variations which occur during irradiation of epoxy resins. Solid epoxy resins and resins synthesized from epichlorohydrin and diphenylene propane with a molecular weight of 1000 and an epoxy number of 9-12 are studied. The structure of resins of this type is as follows:



where n=0-15

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UDC: 547.914

ACC NR: AP6033274

Powdered resin specimens were irradiated both in air and in a vacuum at room temperatures by a stream of fast electrons with an energy of 200 kev and a current density of  $0.0143 \text{ ma/cm}^2$ , and by  $\text{Co}^{60}$  gamma rays. The radiation doses varied from 20 to 1500 Mrad. The following methods were used: infrared spectroscopy, mass-spectrometric analysis, thermomechanical analysis and solubility in acetone. The results of these studies show that breaking of epoxy rings, cross linking and destruction occur during ionizing radiation. Cross linking can be explained by the fact that hydrogen atoms break away from methyl groups to form radicals. This is verified by triplet formation observed in electron paramagnetic resonance spectra during irradiation of diphenylene-propane and epoxy resin. Orig. art. has: 4 figures, 1 table, 4 formulas. —

SUB CODE: 07/ SUBM DATE: 09Dec65/ ORIG REF: 006/ OTH REF: 003

Card 2/2

RYUKHIN, N.V.; BAKAYEVA, Ye.M.

Hygroscopic moisture in varying types of paper. Bur.prom.  
30 no.5:8-10 My '55. (MIRA 8:8)

1. Tsentral'nyy nauchno-issledovatel'skiy institut bumagi.  
(Paper--Testing)

BAKAYEVA, Yekaterina Vasil'yovna; CHERNOGOLOVIN, Vasilii Petrovich;  
SHEVEYKO, A.S., red.; URBISINOV, A., tekhn. red.

[Soybean in Kazakhstan] Soia v Kazakhstano. Alma-Ata, Kaz-  
sel'khozgiz, 1963. 35 p. (MIRA 17:1)  
(Kazakhstan--Soybean)