

Certain special features ...

S/844/62/000/000/079/129
D423/D307

radicals and chain breakage in the polymer, resulting in low-molecular weight PTFE. Experiments in the solid state were carried out from -80 to 0°C with dosages of 1×10^5 and 1×10^4 rad. Almost total conversion of monomer occurred after 200 min at -80°C and after 20 mins at 0°C. Exceptionally large yields were obtained in comparison with similar reactions of other unsaturated compounds. The existence of a radiation after-effect was confirmed, which continued over several hours after removal of the radiation source. Experiments in the gas phase showed the presence of an induction phase extending over several hours. After the appearance of solid PTFE the reaction velocity was increased. The temperature was maintained at 20 - 25°C and a ^{90}Sr β source was used with a dose-rate of 5 rad/sec. Results indicated a high tendency of TFE towards radiation polymerization with a high yield (approx. 10^6 mol/100 ev absorbed). There are 5 figures and 1 table.

Card 2/2

MAYRANOVSKIY, S.G.; BELIKOV, V.M.; KORCHEMAYA, TS.B.; NOVIKOV, S.S.

Mechanism of reduction of nitro compounds on the dropping
mercury electrode. Izv. AN SSSR. Otd. khim. nauk no. 3: 523-525
Mr '62. (MIRA 15:3)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.
(Nitro compounds) (Reduction, Electrolytic)

BELIKOV, V.M.; MAYRANOVSKIY, S.G.; KORCHEMNAYA, TS.B.; NOVIKOV, S.S.

Tautomerism of nitro compounds. Report No.4: Mechanisms of
tautomeric transformations of nitro compounds. Izv.AN SSSR
Otd.khim.nauk no.4:605-614 Ap '62. (MIRA 15:4)

1. Institut organicheskoy khimii im. N.D.Zelinskogo.
(Nitro compounds) (Tautomerism)

NOVIKOV, S.S.; BELIKOV, V.M.; YEPISHINA, L.V.

Action of chlorinating agents on nitrodiols. Izv. AN SSSR. Otd.-
khim.nauk no.6:1111-1116 '62. (MIRA 15:8)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.
(Ethanediol) (Chlorination)

NOVIKOV, S.S.; SLOVETSKIY, V.I.; BELIKOV, V.M.; ZAVILOVICH, I.M.;
YEPISHINA, L.V.

Spectrophotometric study of dissociation constants of
1,1-dinitropentane, 1,1-dinitrohexane, and 1,1-dinitrodecane.
Izv.AN SSSR.Otd.khim.nauk no.3:520-523 Mr '62. (MIRA 15:3)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.
(Nitro compounds) (Ionization) (Spectrophotometry)

VITA, N.V.; CHERNOUSHEVA, M.B.; BELOV, V.M.

Analysis of amino acids by the capillary chromatography.
Dokl. AN. SSSR, Ser. Khim. no. 6:947-948 Vy. '64. (MIRA 17:6)

1. Immunofluorescentoorganicheskiy analizantnyy reagent.

BELIKOV, V.M.; BELOKON', Yu.N.

Nucleophilic addition of a magnesium complex of nitroacetic acid.
Izv. AN SSSR. Ser. khim. no.6:1134 Je '64.

(MIRA 17:11)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

L 31346-65 EWT(m)/EPF(c)/EPR/EMP(j)/EWA(c) Pc-4/Pr-4/Ps-4 RPL WW/RM

ACCESSION NR: AP4045797

S/0062/64/000/009/1599/1605

28
26
B

AUTHOR: Belikoy, V. M.; Korchemnaya, Ts. B.; Mayranovskiy, S. G.;
Novikov, S. S.

TITLE: Tautomerism of nitro compounds. Communication 6: Use of the pH meter for investigating the kinetics of acid dissociation and recombination of 1-nitropropane

SOURCE: AN SSSR. Izv. Seriya khimicheskaya, no. 9, 1964, 1599-1605

TOPIC TAGS: nitropropane, tautomerism, acid dissociation kinetics, acid recombination kinetics, recombination rate constant, energy of activation, preexponential constant, entropy of activation, protolytic reaction

ABSTRACT: The rate of dissociation of 1-nitropropane by the action of a base (KOH) and the rate of recombination of the potassium salt of 1-nitropropane by the action of HCl was investigated. Studies of the rates of these protolytic reactions in the pH range from 5.5-10 were conducted using a pH-meter SBU-1a/SBR-2c with titrator TTT-1c ("Radiometer" Company). 1-nitropropane containing less than 0.5% of 2-nitropropane was used; contamination by the latter caused

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ACCESSION NR: AP4045727

significant change in the rate constant-pH relationship (e. g., slope of the pK_1 -pH line was 0.64, compared to 0.94 for the purified 1-nitropropane). The recombination rate constant varied from 780 1/M. sec. at pH 7.5 to 490 1/M. sec. at pH 5.5. Using an average value of these constants, corresponding to the value of pH 6.1, the energies of activation, the preexponential constant and the entropies of activation were calculated for the dissociation and recombination of 1-nitropropane by the action of H_2O , OH^- and H_3O^+ . To determine if the rate constant of the recombination of the 1-nitropropane anion was dependent on the concentration of weak acids, reactions were run at 15C in the presence of varying amounts of glycocoll. The rate constant at pH 7.7-8.2 remained constant, equaling 4×10^{-2} 1/M. sec. The results obtained in the present investigation complemented those obtained previously by the authors' polarographic studies in buffered solutions (Izv. AN SSSR. Otd. khim. n. 1962, 605). Orig. art. has: 3 figures, 2 tables, and 17 equations

ASSOCIATION: Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR (Institute of Organometallo Compounds, Academy of Sciences SSSR) Institut organicheskoy khimii Akademii nauk SSSR im. N. D. Zelinskogo (Institute of

Card 2/3

L 31346-65

ACCESSION NR: AP4045797

Organic Chemistry, Academy of Sciences SSSR)

SUBMITTED: 29Dec62

ENCL: 00

SUB CODE: GC, GD, OC

NO REF SOV: 002

OTHER: 000

Card 3/3

B. BIYEVSKIY, K.K.; BELIKOV, V.M.; TIKHONOVA, N.A.

Amino acids. Report No.1: Synthesis of DL-threonine and
DL- α -aminobutyric acid based on the reactions of nitro-
acetic ester condensation. Izv. AN SSSR Ser. Khim. no.1:
89-95 '65. (MIRA 18:2)

1. Institut elementoorganicheskikh soedineniy AN SSSR.

BABIYEVSKIY, K.K.; BELIKOV, V.M.; TIKHONOVA, N.A.

Reduction of esters of substituted α -nitroacrylic acids on a skeletal nickel catalyst. *Izv. AN SSSR. Ser. khim.* no.4:750-751 '65.

(MIRA 18:5)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

BABIYEVSKIY, K.K.; BELIKOV, V.M.; BELOKON', Yu.N.

Amino acids. Report No.2: Synthesis of D L-proline from nitroacetic ester derivatives. Izv. AN SSSR, Ser. khim. no.7:1226-1229 '65. (MIRA 18:7)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

(A) L 2794-66

ACCESSION NR: AP5023717

44 UR/0025/65/000/008/0014/0021

AUTHOR: Nesmeyanov, A. (Academician); Belikov, V. (Candidate of chemical sciences)

TITLE: Synthetic food, a new problem in chemistry

27
B

SOURCE: Nauka i zhizn', no. 8, 1965, 14-21

TOPIC TAGS: nutrition, food technology, chemical industry

ABSTRACT: The problems of synthetic food production are considered with regard to the human requirements of water, protein, carbohydrates, fats, salts, and vitamins. It is pointed out that synthetic methionine and yeast protein concentrates are being produced and used commercially for food production. The consistency and taste of artificial food is discussed. It is concluded that although little has been done in the area of synthetic food production, there is a great future for this industry. Orig. art. has: 6 tables.

ASSOCIATION: none

SUBMITTED: 00

NO REF SOV: 000

ENCL: 00

SUB CODE: LS, GC

OTHER: 000

BVK

Card 1/1

YANOVSKAYA, L.A.; BELIKOV, V.M.

Chemistry of acetals. Report No.18: Rate of hydrolysis of some
mono- and diacetals. Izv. AN SSSR. Ser. khim. no.8:1363-1369 '65.
(MIRA 18:9)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.

L-13911-66

ACC NR: AP5025244

(A)

SOURCE CODE: UR/0026/65/000/009/0013/0023

AUTHORS: Nesmeyanov, A. N. (Academician); Belikov, V. M. (Candidate of chemical sciences)ORG: Institute of Elemento-organic Compounds, AN SSSR, Moscow (Institut elementoorganicheskikh soyedineniy AN SSSR)

TITLE: Problems of foodstuff synthesis

SOURCE: Priroda, no. 9, 1965, 13-23

TOPIC TAGS: food technology, organic synthetic process, protein, amino acid, carbohydrate, vitamin

ABSTRACT: Following a brief review of the progress in synthetic organic chemistry during the last century and of its effect upon human activities (synthetic dyestuff, medicinals, synthetic rubber, fibers, leather) the authors bring up the question of the synthesis of foodstuffs. The discussion develops along the lines of requirements, present natural supply, and possible synthetic production of five components of human foodstuff:¹⁴ protein, carbohydrates, fats, vitamins, and mineral salts. Of these, the last two are already produced synthetically. The synthesis of proteins, the component most deficient in the diet of the world population, can be reduced to the preparation of eight noninterchangeable amino acids. This can be accomplished by a total chemical synthesis, microbiological synthesis, or a combination of the two. Methane or olefins may serve as starting materials for the first of these

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UDC: 54.114: 641.58

L 13911-66

ACC NR: AP5025244

methods. Reductive amination of α -ketoacid is especially attractive, as the last step in this process may be accomplished by microorganisms producing the desired L-isomer of the amino acid. One of the newest methods introduced by French scientists involves growing yeast on petroleum fractions. The protein thus produced may be used in human foodstuff. Fats and carbohydrates can be obtained so cheaply from agricultural products that there are no known competitive synthetic processes. Solutions to the problems of taste, palatability, and consistency of synthetic foodstuffs are offered. Advantages of the synthetic production of foodstuff are described. They include abundance of nourishment, independence from the forces of nature, and release of 34% of human labor now employed in agriculture for other activities. Orig. art. has: 4 tables and 2 figures.

SUB CODE: 06, 07/ SUBM DATE: none/ SOV REF: 001/ OTH REF: 002

OC
Card 2/2

GORDIYENKO, S.V.; BELIKOV, V.N.

Isolation of L-glutamic acid from culture fluids. Zhur.prikl.khim.
38 no.6:1412-1414 Je '65. (MIRA 18:10)

BABIYEVSKIY, K.K.; BELIKOV, V.M.; TIKHONOVA, N.A.

Preparation of α -nitroacrylic ester. Dokl. AN SSSR 160 no.1:
103-105 Ja '65. (MIRA 18:2)

1. Institut elementoorganicheskikh soyedineniy AN SSSR. Submitted
July 1, 1964.

VITT, S.V.; PASKONOVA, Ye.A.; ZHARIKOVA, N.A.; BELIKOV, V.M.

Determination of the structure of isomers by gas chromatographic retention parameters. Dokl. AN SSSR 160 no.3:594-595 Ja '65.
(MIRA 18:3)

1. Institut elementoorganicheskikh soyedineniy AN SSSR. Submitted July 2, 1964.

L 32834-66 EWT(m)/T/EWP(j) WW/GG/RM

ACC NR: AR6000273

SOURCE CODE: UR/0081/65/000/014/S019/S019

AUTHOR: Volkova, Ye. V.; Zimakov, P. V.; Fokin, A. V.; Sorokin, A. D.; Skobina, A. I.; Belikov, V. K.

TITLE: Radiation polymerization of fluorolefins

53
54
B

SOURCE: Ref. zh. Khimiya, Abs. 14S109

TOPIC TAGS: olefin, polymer, radiation polymerization, radiation effect, polymerization

ABSTRACT: A study was made of the bulk polymerization of tetrafluoroethylene, trifluoroethylene, difluoroethylene, trifluorochloroethylene and monofluoroethylene at temperatures ranging from 20 to -78C with exposure to ⁶⁰Co γ -radiation in doses of 1--50 rad/sec. Under these conditions, solid high-molecular polymers were obtained. The bulk polymerization rate was found to decrease in the above order. Certain peculiarities of the processes investigated connected with the products of monomeric radiolysis in the secondary processes leading to the development of active products and connected with the heterogeneity of processes, were determined. Characteristics of radiation polymerization in bulk of hexafluoropropylene (I) in the liquid and solid phases are given. It has been found that the conversion of I occurs at

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ACC NR: AR6000273

the same rate in the liquid (-78C) and the solid (-196C) phases, as well as at the phase transition point (-156C). As the temperature increases from -78C to 40C, the speed of the process increases. The polymerization of I in the bulk occurs with the formation of polymer fluids with a mol.wt from 400 to 4000. A. Sorokin. [Translation]

[NT]

SUB CODE: 11, 07/ SUBM DATE: none

Card 2/2

ACC NR: AT6034055

(A) SOURCE CODE: UR/0000/66/000/000/0109/0114 3

AUTHOR: Volkova, Ye. V.; Zimakov, P. V.; Fokin, A. V.; Sorokin, A. D.; Belikov, V. M.;
Bulygian, L. A.; Skobina, A. I.; Krasnousov, L. A.

ORG: none

TITLE: Radiation polymerization of fluoroolefins

SOURCE: Simpozium po radiatsionnoy khimii polimerov. Moscow, 1964. Radiatsionnaya
khimiya polimerov (Radiation chemistry of polymers); doklady simpoziuma. Moscow, Izd-vo
Nauka, 1966, 109-114TOPIC TAGS: radiation polymerization, halogenated organic compound, polymerization
kinetics, reaction mechanism

ABSTRACT: Results of the authors' previously published studies on radiation polymerization of unsaturated fluorine-containing compounds are reviewed, explaining certain characteristics of the process associated with the effects of the electronegative fluorine atom, heterogeneous process conditions and radiolysis products. Tetrafluoroethylene is distinguished by its rapid polymerization under ionizing irradiation, with complete monomer conversion in three hours at -78°C . in liquid phase polymerization with 10 rad/sec radiation, and in ten minutes at $+20^{\circ}\text{C}$. The yield of 7×10^6 molec/100ev is the highest known for radiation chemical reactions.

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ACC NR: AT6034055

Progressive substitution of the fluorine atoms by hydrogen or chlorine or by trifluoromethyl groups reduces polymerization rate and yields: perfluoroisobutylene will not polymerize. Thus the rate of radiation polymerization decreases in the series: $CF_2 = CF_2 > CF_2 = CFH > CF_2 = CH_2 > CFH = CH_2 > CF_2 = CFC1 > CF_2 = CF-CF_3 > CF_2 = C(CF_3)_2$. A kinetics study showed that the polymerization of tetrafluoroethylene under heterogeneous conditions proceeds by a radical mechanism, but the kinetics are more complex than in chemical polymerization due to the effect of radiolysis products. The effect of temperature on radiation bulk polymerization rates of trifluorochloroethylene, vinylidene fluoride and tetrafluoroethylene showed the rates increased to a maximum at certain temperatures: these maxima and the corresponding energies of activation are $35^\circ C$ at 10 rad/sec, -6.8 kcal/mol; $50^\circ C$ at 6 rad/sec, -9 kcal/mol; $70^\circ C$ at 6 rad/sec, -18.7 kcal/mol, respectively. Secondary processes with the radiolysis products start to occur at higher temperatures. Orig. art. has: 2 figures and 1 table.

SUB CODE: 07/ //
SUBM DATE: 25Jul66/ ORIG REF: 015/ OTH REF: 003

Card 2/2

PHASE I BOOK EXPLOITATION

SOV/3825

Belikov, Vasilii Nikolayevich, and Aleksandr Nikitich Nikitin

Sborka aviatsionnykh dvigateley; uchebnoye posobiye (Assembly of Aircraft Engines; a Textbook) Moscow, Oborongiz, 1959. 129 p. Errata slip inserted. 4,300 copies printed.

Sponsoring Agencies: Moscow. Aviatsionnyy institut imeni Sergo Ordzhonikidze; Ministerstvo vysshego i srednego spetsial'nogo obrazovaniya RSFSR.

Ed.: K.I. Grigorash; Tech. Ed.: V.P. Rozhin; Managing Ed.: A.S. Zaymovskaya, Engineer.

PURPOSE: This textbook is intended for students in vuzes and tekhnikum. It will be of interest to engineers and technicians in the aircraft engine industry.

COVERAGE: This is the standard text for a course on the assembly of aircraft engines. The book contains basic information on planning and organizing the assembly of aircraft engines as far as technical operations and precision are concerned. It describes the necessary preliminary operations and indicates the basic joints and connections. Diagrammatic examples illustrate the assembly of

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Assembly of Aircraft Engines (Cont.)

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component engine parts. Materials on the assembly of engines with centrifugal compressor were prepared by senior instructor M.Ye. Levit. The authors thank V.I. Sivkov and M.I. Yevstigneyev. There are 18 references: 17 Soviet and 1 English.

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Card 2/5

~~BELIKOV, Vasilii Nikolayevich; NIKITIN, Aleksandr Nikitich;~~
~~ZHADIN, G.P., dots.,~~ retsenzent; KOLOSOV, M.A., inzh.
red.; VILLER, G.L., red.

[Assembly of airplane engines] Sborka aviatsionnykh dvigatelei. Moskva, Mashinostroenie, 1964. 221 p.
(MIRA 17:8)

L 24513-65 EWT(d)/EWP(f)/EWP(c)/EWA(d)/EWP(v)/T/EWP(k)/EWP(h)/EWP(l) Pf-4

ACCESSION NR AM5002711

BOOK EXPLOITATION

S/

Belikov, Vasilii Nikolayevich; Nikitin, Aleksandr Nikitich

32
B+1

Assembling of aircraft engines (Sborka aviatsionnykh dvigateley), Moscow, Izd-vo "Mashinostroyeniye", 1964, 221 p. illus., biblio. Errata slip inserted. 5,000 copies printed. Series note: Tekhnologiya aviadvigatelestroyeniya

TOPIC TAGS: aircraft engine manufacture, automation, rocket engine

PURPOSE AND COVERAGE: This book contains information on the basic types of joints used in the assembly of aircraft engines and methods of making them. Data are given on the design and organization of the engineering processes of assembly. Problems of precision of assembly are considered. Preliminary operations are described and examples are given of component and general assembly of engines of several types. The book is a textbook for students in aviation institutes and departments. It can also be of interest to engineers and technicians of the aviation industry.

TABLE OF CONTENTS [abridged]:

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ACCESSION NR AH 5002711

SUBMITTED: 15 May 64

SUB CODE: IE, PR

NO REF SOV: 033

OTHER: 012

Card 3/3

BELIKOV, V.P.

USSR/Chemical Technology - Chemical Products and Their
Application. Industrial Organic Synthesis.

I-1

Abs Jour : Ref Zhur - Khimiya, No 1, 1958, 2149

Author : Korzhev, P.P., Belikov, V.P.

Inst : Academy of Sciences USSR

Title : Incomplete Oxidation of Propane with Formation of Acetalde-
hyde and Other Oxygen-Containing Products at Ordinary
Pressure.

Orig Pub : Sb.: Khim. pererabotka neft. uglevodorodov. M., AN SSSR,
1956, 366-368

Abstract : Results of a study of low-temperature oxidation of propane
(I), at atmospheric pressure, with the view of obtaining
liquid oxygen-containing products. The experiments were
conducted in a flow system, with a reactor of quartz or
metal tubes (45 mm in diameter, 1800 mm long), at 360-380°.

Card 1/2

BEL'KOV, V.P.

Significance of high seeding rates of coniferous species with
reference to the influence of herbaceous plants. Bot. zhur. 45
no.4:608-612 Ap '60. (MIRA 14:5)

1. Tsentral'nyy nauchno-issledovatel'skiy institut lesnogo
khozyaystva, Leningrad.

(Afforestation)

(Pine)

(Spruce) .

BELIKOV, V.S.

SOLOV'YEVA, Anna Grigor'yevna,; LEZERSON, V.K., otv. red.; BELIKOV, V.S., red.;
MAZEL', Ye.I., tekhn. red.

[Fundamentals of telephony and telephone central offices using
manual systems] Osnovy telefonii i telefonnye stantsii ruchnogo
obsluzhivaniia. Moskva, Gos. izd-vo lit-ry po voprosam sviasi
i radio, 1958. 341 p.

(MIRA 11:12)

(Telephone)

BELIKOV, V.S., inzh.; ZIL'BERFARB, P.M., inzh.; MEL'NIK, M.F., inzh.

Making large silicate blocks in a specialized shop. Stroi.
mat. 5 no.2:23-26 F '59. (MIRA 12:2)
(Building blocks) (Silicates)

BELIKOV, V.T.

A double-stator asynchronous regulated motor. Energ. i elektrotekh.
prom. no. 4:43-45 O.D. '62. (MIRA 16:2)
(Electric motors, Induction)

BELIKOV, V.T.

Asynchronous short-circuited motors regulated by axial displacement
of the active parts. Energ. i elektrotekh. prom. no.1:28-31 Ja-Mr
'63. (MIRA 16:5)

(Electric motors, Induction)

BELIKOV, V.V.

Electrolytic regeneration of soda from autoclave tungstate solutions. Izv. vys. ucheb. zav.; tsvet. met. 8 no.4:78-83 '65.
(MIRA 18:9)

1. Kafedra metallurgii tyazhelykh tsvetnykh i blagorodnykh metallov Leningradskogo gornogo instituta.

BOLOTNIKOV, S.M.; SHRAYBER, M.S.; BELIKOV, V.V.

Quantitative determination of reserpine. Med.prom. 13 no.12:41-43
D '59. (MIRA 13:4)

1. Khar'kovskiy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy
institut.

(RESERPINE)

BELIKOV, V.V. [Belikov, V.V.]; SHRAYBER, M.S.

Use of compleximetric titration in the analysis of complex medicinal forms. Report No.2: Determination of calcium and zinc. Farmatsev. zhur. 16 no.6:25-31 '61. (MIRA 15:5)

1. Farmako-analiticheskaya laboratoriya Khar'kovskogo nauchno-issledovatel'skogo khimiko-farmatsevticheskogo instituta.

(DRUGS--ADULTERATION AND ANALYSIS)
(CALCIUM--ANALYSIS) (ZINC--ANALYSIS)

BELIKOV, V.V.; SHRAYBER, M.S.; BOLOTNIKOV, S.M. [deceased]

Use of complexometric titration in determining bismuth and zinc in
medical suppositories. Apt. delo 11 no.1:50-53 Ja-F '62.

(MIRA 15:4)

1. Khar'kovskiy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy
institut.

(SUPPOSITORIES) (ZINC) (BISMUTH)

BELIKOV, V.V. [Bielikov, V.V.]; SHRAYBER, M.S.

Use of complexometric titration in the analysis of complicated medicinal preparations. Report No.3: Direct titration of lead and mercury. Farmatsev. zhur. 17 no.1:7-11 '62. (MIRA 15:6)

1. Khar'kovskiy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut.

(DRUGS—ADULTERATION AND ANALYSIS)
(LEAD) (MERCURY)

BELIKOV, Ye.F.

[Instructions for the approximate determination of astronomical azimuths and geographical latitudes from the known heights of the sun and stars; to be used in the survey for the construction of the RU-14-54 hydroelectric power stations] Rukovodiashchie ukazaniia po opredeleniiu priblizhennymi sposobami astronomicheskikh azimutov i geograficheskikh shirot po izmerennym vysotam solntsa ili zvezd pri izyskaniakh dlia gidroenergeticheskogo stroitel'stva RU-14-54. Moskva, Gos.energ.izd-vo, 1955. 151 p. (MIRA 12:7)

1. Vsesoyuznyy institut po izyskaniyam i proyektirovaniyu gidroenergeticheskikh stantsiy.

(Hydroelectric power stations)

(Astronomy, Spherical and practical)

Belikov, Ye. F.

LIVANOV, Mikhail Mikhaylovich; BELIKOV, Ye. F., red.; INOZEMTSOVA, A. I.,
red. izd-va; BOTVINKO, M. V., tekhn. red.

[Engineering surveying and the compilation of detailed plans for
industrial enterprises] Inzhenerno-geodezicheskaya s"emka i sostavle-
nie ispolnitel'nykh planov promyshlennykh predpriatii. Moskva,
Izd-vo geodez. lit-ry, 1957. 214 p. (MIRA 11:2)
(Surveying)

BELIKOV, YEVGENIY FEDOROVICH

BLIZNYAK, Yevgeniy Varfolomeyevich, prof., doktor tekhn.nauk; BELIKOV, Yevgeniy Fedorovich, dotsent; BELYY, Leonid Dmitriyevich, dotsent, kand. geologo-mineral.nauk; DUBROVSKIY, V.V., red.; VORONIN, K.P., tekhn.red.

[Surveying for water power] Vodnoenergeticheskie izyskaniia.
Pod red. E.V. Blizniaka. Moskva, Gos.energ.izd-vo, 1957. 319 p.
(MIRA 10:12)

(Water power)

ULITIN, A.I., inzh.: Prinsipalni uchastnye: ROZA, S.A., doktor tekhn.nauk;
FILONENKO, A.S., prof.; BELIKOV, Ye.F., dotsent. DURNEV, A.I.,
prof., doktor tekhn.nauk, red.: SOBOLEVA, Ye.M., tekhn.red.

[Instructions for observing the settling and horizontal displacements of hydraulic structures by geodetic methods] Nastavlenie po nabludeniiam za osadkami i gorizonta'l'nymi smeshcheniiami gidrotekhnicheskikh sooruzhenii geodesicheskimi metodami. Moskva, Gos.energ.isd-vo, 1958. 111 p. (MIRA 13:6)

1. Hidroenergoprojekt, trust, Moscow. 2. Konsul'tant instituta "Hidroenergoprojekt" (for Filonenko).
(Hydraulic engineering) (Surveying)

BELIKOV, Ye.F., dotsent; VASILENKO, S.S., inzh.; KOLOSOV, B.A., dotsent, retsenzent; VORONIN, V.A., inzh., retsenzent; FILONENKO, A.S., prof., red.; KHROMCHENKO, F.I., red., izd-va; ROMANOVA, V.V., tekhn. red.

[Engineering surveying in planning and constructing hydroelectric power stations] Inzhenerno-geodezicheskie raboty pri proektirovani i stroitel'stve gidroelektrostantsii. Pod red. A.S. Filonenko. Moskva, Izd-vo geodez. lit-ry, 1960. 172 p. (MIRA 13:7)
(Surveying) (Hydroelectric power stations)

BELIKOV, Ye.F

KUZNETSOV, Sergey Mikhaylovich; CHASTUKHIN, S.A., inzh.-geodezist, retsenz-
zent; KLIMOV, O.D., kand.tekhn.nauk, retsenzent; MURAV'YEV, M.S.,
dotsent, retsenzent; LEVCHUK, G.P., dotsent, kand.tekhn.nauk,
retsenzent; LEBEDEV, N.N., dotsent, retsenzent; GLOTOV, G.F., dotsent,
retsenzent; GRIGOR'YEV, V.M., inzh.-geodezist, retsenzent; PIMENOV,
A.F., inzh.-geodezist, retsenzent; BELIKOV, Ye.F., dotsent, red.;
KHROMCHENKO, F.I., red.izd-va; ROMANOVA, V.V., tekhn.red.

[Geodetic operations in the design and construction of hydraulic
structures] Geodezicheskie raboty pri proektirovanii i stroitel'stve
gidrotekhnicheskikh sooruzhenii. Moskva, Izd-vo geod.lit-ry, 1960.
173 p. (MIRA 13:9)

(Hydraulic engineering)

(Surveying)

BELIKOV, Yevgeniy Fedorovich, dotsent; VORONIN, Viktor Aleksandrovich, inzh.;
GLOTOV, Georgiy Fedorovich, dotsent; ZELENKOV, Yuriy Vladimirovich,
inzh.; IVANOV, Leonid Fedorovich, inzh.; KORENEV, Gleb Sergeyevich,
inzh. [deceased]; MASLENNIKOV, Anatoliy Stepanovich, inzh.; SIROTKIN,
Mikhail Pavlovich, dotsent; ULITIN, Andrey Il'ich, inzh.; URUSOV,
Nikita Yur'yevich, inzh.; FLOROVSKIY, Yuriy Sergeyevich, inzh.;
SHAKHIDZHANYAN, Grand Aleksandrovich, inzh.; EGLIT, Vitaliy Ivanovich,
inzh.; VASIL'YEVA, V.I., red.isd-va; ROMANOVA, V.V., tekhn.red.

[Guidebook on principles of engineering geodesy used in planning
and building hydroelectric power stations] Spravochnoe rukovodstvo
po inzhenerno-geodesicheskim izyakaniam pri proektirovanii i stroi-
tel'stve gidroelektrostantsii. Pod obshchei red. E.F.Belikova.
Moskva, Izd-vo geodez.lit-ry, 1960. 447 p. (MIRA 13:11)
(Hydroelectric power stations) (Geodesy)

BELIKOV, Yevgeniy Fedorovich, dots.; KHRENOV, L.S., prof.; SHAMAROVA,
T.A., red. izd-va; SUNGUROV, V.S., tekhn. red.

[Bibliographical index of geodetic literature for the 40-year
period, 1917-1956] Bibliograficheski ukazatel' geodezicheskoi
literatury za 40 let; 1917-1956. Pod red. L.S.Khrenova. Moskva,
Izd-vo geod. lit-ry, 1961. 535 p. (MIRA 15:2)
(Bibliography—Surveying)

SIROT'KIN, Mikhail Pavlovich; BELIKOV, Ya.F., retsenzent; FLOROVSKIY, Yu.S., retsenzent; GLOT'OV, G.F., red.; VASIL'YEVA, V.I., red. izd-va; ROMANOVA, V.V., tekhn. red.

[Handbook on geodesy for builders] Spravochnik po geodezii dlia stroitelei. Moskva, Geodezizdat, 1962. 279 p. (MIRA 15:9)
(Surveying) (Building)

LYUTS, Aleksandr Fedorovich, prof.; SOROKIN, Vasily Pavlovich, dots.;
FINKOVSKAYA, Tamara Semenovna, dots.; KOKOVIKHIN, Mikhail
Fedorovich, inzh.; KIRILENKO, Vasily Sergeevich, kand. tekhn.
nauk; BELIKOV, Ye.F., dots., retsenzent; KHVOSTIK, I.F., red.;
KOMAR'KOVA, L.M., red.izd-va; SUNGUROV, V.S., tekhn. red.

[Surveying in railroad engineering] Geodeziia v zheleznodorozh-
nom dele; spravocnoe posobie. [By] Liutts, A.F. i dr. Moskva,
Gedezizdat, 1962. 342 p. (MIRA 16:1)
(Railroads--Surveying)

- LIVANOV, Mikhail Mikhaylovich; BELIKOV, Ye. F., dotsent, retsenzent;
SHILOV, F. Ye., inzhener-geodezist, retsenzent; LETOVAL'TSEV, I. G.,
dotsent, red.; VASIL'YEVA, V. I., red. izd-va; ROMANOVA, V. V., tekhn. red.;

[Surveying in construction] Geodeziia v stroitel'stve. Moskva,
Gosgeoltekhizdat, 1963. 312 p. (MIRA 16:6)
(Surveying)

ZENTSOV, Andrey Stepanovich; BELIKOV, Ye.F., red.; SHURYGINA, A.I.,
red.izd-va; ROMANOVA, V.V., tekhn. red.

[Geodesy in the construction of large hydroelectric power
stations and their tunnels] Geodeziia pri stroitel'stve krup-
nykh gidroelektrostantsii i ikh tunnelei; iz opyta robot. Mo-
skva, Gosgeoltekhizdat, 1963. 223 p. (MIRA 16:10)
(Hydroelectric power stations) (Surveying)

BELIKOV, Ye.F., dots.; SOLOV'YEV, L.P., inzh.; KHRENOV, I.S.,
prof., red.; BRAZHNIKOV, V.I., ved. red.

[Bibliographic index of geodetic literature for the five-
year period 1957-1961] Bibliograficheskii ukazatel' geode-
zicheskoi literatury za 5 let; 1957-1961. Moskva, Nedra,
265 p. (MIRA 17:7)

U^S BELIKOV, Ye.I.

12/1/58

144. ORGANIZATION OF THE DRYING DEPARTMENT IN THE "RED STAR" FACTORY.--I. P. Kvitchenko and E. I. Belikov. (Gyromy, 14, No. 1948). Examples are given of the way monthly throughput of benches in the drying department is planned in order to avoid bottle-necks. (3 tables)

L 44280-66 EWT(1)/EWT(m)/T WW/DJ

ACC NR: AP6005392 (N) SOURCE CODE: UR/0413/66/000/001/0141/0141

INVENTOR: Belikov, Ye. M.; Bukin, V. A.; Areshchenko, A. N. 23

ORG: none 8

TITLE: Multistage centrifugal pump. Class 59, No. 177777

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 1, 1966, 141

TOPIC TAGS: pump, centrifugal pump

ABSTRACT: This Author Certificate introduces a multistage centrifugal pump with a labyrinth shaft seal and gradual pressure reduction on the seal. To rid the labyrinth of mechanical inclusions when operating with a polluted fluid, the pump is made with bypass pipes connecting the circular grooves of the labyrinth bushings with the respective pressure stages of the pump (see Fig. 1). Orig. art. has: 1 figure.

Card 1/2

UDC: 621.67

L 2597-66 EWT(1)/EEC(k)-2/EWA(h)
ACCESSION NR: AP5019199

UR/0115/65/000/006/0041/0043
621.317.733.023

AUTHOR: Zaks, L. M.; Petrov, V. M.; Belikov, Ye. N.

36
29
B

TITLE: M4-3 self-balancing thermistor d-c bridge for measuring shf power

SOURCE: Izmeritel'naya tekhnika, no. 6, 1965, 41-43

TOPIC TAGS: thermistor bridge, dc bridge, ²⁵shf wattmeter / M4-3 thermistor bridge

ABSTRACT: A newly developed portable ²⁸M4-3 shf thermistor bridge¹⁰, which is an improvement of the older M4-1 type, has a d-c double-bridge circuit, a direct reading on a ferrodynamic-wattmeter scale, and an autocompensation system. Its measurement scope is 5-7500 μ w; basic error, $1.5 \pm 0.3\%$; zero-point drift, 0.3 μ w; supply, 220 v 50 cps; weight, 25 kg. The double thermistor bridge consists of an external supply bridge in one of whose arms an internal measuring bridge is inserted. The shf measuring thermistor forms an arm of the internal

Card 1/2

Card 2/2

L 3801-66

ACCESSION NR: AP5025585

UR/0115/65/000/009/0041/0043
621.317.733.023

AUTHOR: Zaks, L. M.; Belikov, Ye. N.; Rypalev, S. V.; Petrov, V. M. 10
B

TITLE: A thermistor bridge with automatic digital readout and automatic zero correction

SOURCE: Izmeritel'naya tekhnika, no. 9, 1965, 41-43

TOPIC TAGS: thermistor, power meter, resistance bridge, digital readout system

ABSTRACT: A self-balancing thermistor bridge is described in which the upper limit of accuracy is raised by using an automatic digital readout system, and the threshold of sensitivity is lowered by adding automatic zero correction to the system. The automatic digital power readout is based on the use of a measuring multiplier which uses the pulse-time method for multiplying two dc voltages taken from the measurement circuit of the bridge. At the output of the multiplier is an analog-digital converter which changes the voltage to a proportional time interval, and an electronic meter which shows these intervals in digital form. The method for automatic zero correction is based on periodic blanking of the modulator for the shf chan-

Card 1/2

L 3301-66

ACCESSION NR: AP5025585

nel and automatic balancing of the measurement system when the power is blocked by means of an electronic servosystem which "remembers" the current level for heating the thermistor. The power reading is fixed directly after automatic zero correction to improve accuracy. A schematic diagram of the instrument is shown and the operating principles are described in detail. The bridge is designed for measuring powers in three ranges up to 10, 100 and 1000 μ w. The measurement error is 0.3% at the maximum power readings. The instrument can also be used for measuring small power values of the order of a few μ w with an error of less than 0.03 μ w. Orig. art. has: 1 figure.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: EC

NO REF SOV: 007

OTHER: 001

PO
Card 2/2

BELIKOV, Ye.N.

Measuring instruments at the Hannover Industrial Exhibition, 1955.
Izm.tekh. no.1:85-89 '56. (MLRA 9:5)
(Hannover--Measuring instruments--Exhibitions)

BELIKOV, Ye. N.

AUTHORS: Pronenko, V.I., Belikov, Ye.N. SOV-115-58-4-35/45

TITLE: A Broad-Band Automatic Super-High Frequency Amplitude Stabilizer (Shirokopolosnyy avtomaticheskiiy stabilizator svch moshchnosti)

PERIODICAL: Izmeritel'naya tekhnika, 1958, Nr 4, pp 81-84 (USSR)

ABSTRACT: Variations of a functional scheme for stabilizing the super-high frequency amplitude level are described. With this scheme existing generators may be used for various types of fine measurement. Details of an actual stabilizing system and equipment are given. Here a broad-band detector section is used for the measuring element, a battery with voltage divider for the reference voltage data-unit, a photo-compensator for the dc amplifier and an electro-mechanical attenuator for the executive mechanism. The detector sections operate in the bands 2.6-3.2 cm and 3.2-3.6 cm as amplitude indicators and have a transfer constant which varies with the frequency approximately from 10-13 db. Details of the individual

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A Broad-Band Automatic Super-High Frequency Amplitude Stabilizer

SOV-115-58-4-35/45

units and the functioning of the stabilizer are given. The stabilizer operates at amplitude levels of 10-100 mwt with a stabilization accuracy of ± 0.5 db. The stabilization factor is roughly 140. There are 2 diagrams, 1 graph, 1 photo and 1 American reference.

1. Frequency stabilizers--Design

Card 2/2

SOV/115-59-6-24/33

28(2)

AUTHOR:

Belikov, Ye.N.

TITLE:

Measuring Instruments at the 12th Exhibition of Chemical Equipment Building "Achema 1958"

PERIODICAL:

Izmeritel'naya tekhnika, 1959, Nr 6, pp 64-66 (USSR)

ABSTRACT:

The author reviews measuring instruments shown at the exhibition of chemical equipment building "Achema 1958" which took place in Frankfurt am Main in May and June 1958. For compiling the review, the author used various German periodicals of which he indicated only "Elektronische Rundschau", "Regelungstechnik", "ETZ-A", "BWK", all published during 1958. There are 5 references, 4 of which are German and 1 Soviet.

Card 1/1

27843

6.4300

S/115/61/000/009/002/006
E032/E114

AUTHORS: Zaks, L.M., and Belikov, Ye.N.

TITLE: Bolometric d.c. bridge for S.H.F. power

PERIODICAL: Izmeritel'naya tekhnika, 1961, No.9, pp. 34-37

TEXT: The apparatus developed by the present authors is illustrated in the figure. The device consists of two bridges: an external supply bridge and an internal measuring bridge. In addition, there is a stabilised supply source 1 with a photocompensated d.c. voltage stabiliser, an output meter (ferro-dynamic wattmeter), null-point indicator 2 with a photo-compensated d.c. amplifier, and a compensating current source 3. The bolometer R_b and the resistor r_b form one arm of the internal measuring bridge and the resistance of the constant comparison arm is equal to the maximum possible working resistance of the bolometer. The supply bridge incorporates the fixed-coil of the wattmeter W_1 , and the compensating circuit includes the second fixed coil W_2 and the movable frame W_3 . The initial balance is achieved by adjusting r_b and by the current through the bolometer by varying the output voltage of the Card 1/4

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Bolometric d.c. bridge for S.H.F. ... S/115/61/000/009/002/006
E032/E114

photocompensated stabiliser. The SHF power incident on the bolometer is compensated by reducing the heating current through the bolometer. The latter is achieved by applying an opposite compensating current. The compensating current produced by the ferroresonance stabiliser 3 is adjusted manually until the bridge is balanced. The measured power is indicated by the output wattmeter. The upper circuit in the figure employs a symmetric supply bridge and is used with small working ranges; the lower circuit employs a non-symmetric supply bridge. The former is employed with waveguide bolometric heads, and the latter with coaxial bolometric heads. The power meter has the following characteristics: working range 100 microwatt to 1 watt, bolometer resistance range 180-640 ohm; errors range between 6 and 10%. Expressions are derived which give the power as a function of the instrumental parameters. The present bolometer is based on previous work by the present authors (Ref.1: L.M.Zaks. Obraztsovyy avtomaticheskiiy termistornyy most postoyannogo toka, "Prototype automatic thermistor d.c. bridge": Trudy institutov Komiteta standartov, mer i izmeritel'nykh priborov, "Trans. of the

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27843

Bolometric d.c. bridge for S.H.F. ... S/115/61/000/009/002/006
E032/E114

Institutes of the Committee for Standards, Measures and Measuring
Instruments", Standartgiz, M., 1960, 48, (108), p.7) and
Ref.2:(L.M. Zaks and Ye.N. Belikov, Avt. svid. No.136794 c
prioretetom ot 18/3/1960, "Author's Certificate No.136794, Priority
from March 18, 1960").

There are 1 figure and 2 tables.

H

Card 3/4

BELIKOV, Ye.N.

Galvanometric d.c. voltage and current stabilizers for thermistor
microwave power measuring devices. Trudy inst. Kom. stand., ser 1
izm. prib. no.65:21-25 '62. (MIRA 16:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut fiziko-tekhnicheskikh
i radiotekhnicheskikh izmereniy.
(Microwave measurements) (Radio measurements)

34671

S/115/62/000/002/007/009
E192/E382

9,4320(1301, 1147, 1163, 2901)

AUTHORS: Zaks, L.M., Petrov, V.M. and Belikov, Ye.N.

TITLE: Improving the insensitivity of thermistor wattmeters for UHF

PERIODICAL: Izmeritel'naya tekhnika, no. 2, 1962, 43 - 48

TEXT: The main factor limiting the sensitivity and accuracy of thermistor wattmeters for UHF is the instability of its indications due to the instability of the temperature of the thermistor and the instability of its heater current. A method of increasing the sensitivity of a thermistor power-meter is described in the following. This is based on the use of temperature compensation and a special galvanometer stabilizer which results in a very high stability of the supply current for the measurement circuit. The methods of temperature compensation of thermistor meters for UHF power are usually based on a coaxial compensating thermistor whose resistance is dependent only on the temperature of the surrounding medium and is practically independent of the current flowing through the thermistor. The condition of compensation is achieved if,

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Improving the

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E192/E382

during temperature changes of the thermistor holder (i.e. temperature of the measuring and compensating thermistors), the changes in the resistance of the compensating thermistor result in a change in the current of the measuring thermistor and the power dissipated in it, such that its temperature and resistance are kept constant. The method of temperature compensation devised at VNIIFTRI is based on the use (Ref. 4: Zaks and Petrov - Authors' Certificate no. 670724/26, June 20, 1960) of an inertia-type compensating thermistor placed in the thermistor holder. This thermistor is in direct contact with the holder and is at the same temperature as the measuring thermistor. The compensating thermistor is connected not in the supply network of the measuring bridge but in the circuit of the reference voltage of a stabilizer feeding the bridge. In this way, it is possible to reduce to a negligible value the power dissipated in the compensating thermistor and thus to increase the efficiency of the temperature compensation in comparison with the other known methods (Ref. 1 - Measurement techniques at centimetre waves, Part II. Pub. Sovetskoye radio, Moscow, 1942:

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Improving the

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Ref. 3 - R.A. Valitov and V.N. Sretenskiy - Radio measurements at ultrahigh frequency, Voenizdat, 1958). The compensating circuit operates as follows. When the temperature of the thermistor-holder is changed, the temperature of the measuring and compensating thermistors, which are in the same thermal conditions, changes accordingly. The change in the resistance of the compensating thermistor, which is connected in the reference circuit of the voltage-stabilizer, leads to a change in the stabilized voltage and this results in a change of the current in the measuring transistor and the power dissipated in it. The temperature of the measuring thermistor and resistor is therefore unchanged. Consequently, when the temperature of the holder is varied, the balance of the thermistor bridge and the indication of the power-meter are unchanged. The reference-voltage divider, which is connected in the feedback loop of the voltage-stabilizer, is in the form of an unbalanced bridge (see Fig. 1), whose output "diagonal" contains the reference-voltage source e and a galvanometer Γ . The e.m.f. of the reference element is connected "against" the voltage of the

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E192/E382

output diagonal of the bridge. The galvanometer stabilizer circuit is illustrated in Fig. 2. The system has three correction circuits. The capacitance $C_{k1} = 0.1 \mu\text{F}$ is connected in the diagonal of a photo-resistor bridge circuit and its purpose is to suppress the oscillations of 50 kc/s frequency. The low-frequency oscillations are suppressed by the network consisting of the capacitance $C_{k3} = 1 \mu\text{F}$ and resistance r_3 as well as the correcting network consisting of the capacitance $C_{k2} = 1 \mu\text{F}$ and a variable resistance $R_{k2} = 47 \text{ k}\Omega$. This circuit is connected between the input of a DC amplifier consisting of transistors T_1, T_2 and the output of the control transistor R_3 . The input voltage of the power stage of the stabilizer is additionally stabilized by an auxiliary transistor stabilizer based on an emitter-follower T_4 , whose reference voltage is provided by a pair of reference diodes.

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ACCESSION NR: AT3013122

S/2589/62/000/065/0021/0025

AUTHOR: Belikov, Ye. N.

TITLE: Galvanometric dc voltage and current stabilizers for thermistor microwave wattmeters

SOURCE: USSR. Komitet standartov, mer i izmeritel'ny*kh priborov. Trudy* institutov Komiteta, no. 65, 1962, 21-25

TOPIC TAGS: stabilizer, galvanometric stabilizer, dc stabilizer, dc current stabilizer, dc voltage stabilizer, thermistor microwave wattmeter, semiconductor stabilizer

ABSTRACT: Since the Soviet industry produces no current stabilizers and the Soviet commercial dc galvanometric voltage stabilizers are ineffective against short line voltage bursts and are too large to be built into portable laboratory instruments, the VNIIFTRI has developed small-size semiconductor high-stability galvanometric current and voltage stabilizers for thermistor measuring circuits. The voltage stabilizer is rated 408 V at 60 mA has an internal resistance less

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ACCESSION NR: AT3013122

than 0.08 ohms and a transient time of 0.25 millisecond following an abrupt change in the load current. The current stabilizer is rated 6 -- 60 mA at 40 V, has an internal resistance larger than 1 megohm and a transient time of 18 milliseconds. Both are designed for 170 -- 250 volts, have a stabilization coefficient not less than 100,000, a short-duration instability not more than 0.0001 per cent-minute, and an output ac component not less than 0.1 per cent. Orig. art. has: 3 figures, 2 formulas and 1 table.

ASSOCIATION: VNIIFTRI

SUBMITTED: Jun61

DATE ACQ: 28Oct63

ENCL: 01

SUB CODE: EE

NO REF SOV: 004

OTHER: 001

Card 2/37

BELIKOV, YU. N., Engineer and RAMEYEV, B. I., Engineer

"Specialized Automatic Digital Computing Machine of the "Kristall" Type" a paper presented at the Conference on Methods of Development of Soviet Mathematical Machine-Building and Instrument-Building, 12-17 March 1956.

Translation No. 596, 8 Oct 56

БЕЛИКОВ, Я.Н.

Report to be presented at the 1st Intl Congress of the Intl Federation of Automatic Control, 27 Aug-3 July 1960, Moscow, USSR.

АВРАМОВ, Д. С. - "Compensating thermo-mechanic gas analyzers".

АВРАМОВ, Д. С. - "Method of determining the optimum dynamic system according to the criterion of the functional extra, which is a given function of several other functions".

АИЗЕНВАЛД, М. А., and ГАРДЖАНОВ, П. П. - "Some problems of the theory of nonlinear systems of automatic regulation with discontinuous characteristics".

АИЗЕНВАЛД, М. А. - "Concerning the organization of the MAPROV function in automatic systems".

МАРАКОВ, А. П. - "Optimal methods of synthesis of nonlinear systems of automatic regulation".

БАШИН, С. М. - "Problems of the application of high liquid pressures for automatic systems".

БЕЛИКОВ, Я. Н. - "The theory of stability of regulation systems".

БЕЛИКОВ, Я. Н. - "Multicoordinate nonlinear interpolator for program control of machines".

БОЖИЛОВ, С. Е., and ДАЛ, А. А. - "Pneumatic alloy systems".

БОЖИЛОВ, С. Е., ДАЛ, А. А., ИЛИНСКИЙ, В. И., КИЗЯКОВИЧ, В. В., МАКИ, Л. В., ПУТОВ, С. А. - "Automated electric drive of the propeller installation of the atomic icebreaker 'Lening'".

БОНДАРЕВИЧ, В. А., and ПИДОВ, С. М. - "Application of the equivalent inductance function in the calculation of follower systems by the method of the equivalent drive method".

БРИК, А. В. - "Control of systems with a delay".

БРИК, А. В., ИЛИНСКИЙ, В. И., and ПРАСИНОВИЧ, И. В. - "Contactless electromechanical systems with a delay".

МУЛТАНСКИЙ, П. С., ГАБРИЛИЦ, П. В., МИСКИНОВ, П. П., and ПОРЗКАДИН, Л. Б. - "The maximum principle in the theory of optimum control processes".

МОЗДОЛ, М. М. - "Automated electric drives of a metallurgical plant".

МОЗДОЛ, М. М. - "Automatic regulation of front-layer processes in nonferrous metallurgy".

DEKHANOV, N.M., inzh., otv. red.; KRAVCHENKO, V.A., inzh., zames. otv. red.; RAGULINA, R.I., inzh., red.; YEM, A.P., kand. tekhn. nauk, red.; GASIK, M.I., assisten, red.; ZEL'DIN, V.S., inzh., red.; SAKHAROV, R.S., red.; BELIKOV, Yu.V., inzh., red.; KOCHERGA, N.T., ved. red.; SYCHUGOV, V.G., tekhn. red.

[Development of the iron alloy industry in the U.S.S.R.] Razvitiye ferrosplavnoi promyshlennosti SSSR. Kiev, Gos. izd-vo tekhn. lit-ry, USSR, 1961. 243 p. (MIRA 15:4)

1. Ukraine. Gosudarstvennyy nauchno-tekhnicheskiy komitet. Institut tekhnicheskoy informatsii. 2. Zaporozhskiy zavod ferrosplavov (for Dekhanov, Kravchenko, Ragulina). 3. Dnepropetrovskiy metallurgicheskiy institut (for Gasik, Belikov).
(Iron industry)

KHITRIK, S.I., doktor tekhn. nauk; DEKhanov, N.M., inzh.;
SARANKIN, V.A., inzh.; ZEL'DIN, V.S., inzh.;
BELIKOV, Yu.V., inzh.

Making manganese metal on a phosphorous-free slag from
first-grade Nikopol' manganese ore. Met. i gornorud.
prom. no.5:66-68 S-0 '63. (MIRA 16:11)

BELIKOV, Yu.V.; KEKELIDZE, M.A.; KRASNYKH, I.F.; SIORIDZE, G.Ya.; KHITRIK,
S.I.; SHATIRISHVILI, G.A.; SHIRER, G.B.

Making silicon-manganese alloys from sintered 2d and 3d-grade
concentrates of the Nikopol' deposit. Stal' 24 no.2:140-143 F '64.
(MIRA 17:9)

YEM, A.P.; CHEPELENKO, Yu.V.; BELIKOV, Yu.V.

Investigating the kinetics of the reduction process of briquets
and of an ordinary charge mixture in the preparation of ferrosilicon.
Nauch. trudy IMI no.51:121-130 '63. (MIRA 17:10)

BELIKOV, Yu.V.; NEFEDOV, Yu.A.

Using Nikopol', 2d and 3d-grade, lean concentrates for the manufacture of silicomanganese. Nauch. trudy DMI no.51:202-214 '63.

(MIRA 17:10)

BELIKOV-SHTOMISH, P. I., Pharmacist

Drugs

Utilizing the pulp of squash cores in the preparation of pills and as emulsifiers.
Apt. delo no. 4, 1952.

Monthly List of Russian Accessions, Library of Congress. November, 1952. UNCLASSIFIED.

EIHE, E. (Riga); BELIKOVA, A. (Riga)

Some observations on growing mixed corn crops. Bestis Latv ak
no.4:109-118 '61. (EEAI 10:9)

1. Latvijas PSR Zinatnu akademijs, Biologijas instituts.

(Corn (Maize))

YOLUYSKAYA, E.H.; TOVARNITSKY, V.I.; ~~BORLIKOVA, A.M.~~

The effect of the properdin system on the influenza virus. J. Hyg. Epidem., Praha 2 no.4:404-407 1958.

1. Ivanovsky Institut of Virology, Biochemistry Department, Moscow D-57, Baltiyskiy pos. 13, U.S.S.R. (for Voluyakaya).

(INFLUENZA VIRUSES, eff. of drugs on, properdin)

(PROPERDIN, eff. on influenza viruses)

ELHE, E.; BELIKOVA, A.

Some observations in growing corn mixed with other crops.
Izv. AN Latv. SSR no.4:109-118 '61. (MIRA 16:1)

1. Latvijas PSR Zinatnu akademijas Biologijas instituts.

(Latvia—Corn(Maise))

PROCESSING AND PROPERTY INDEX

BELIKOVA, H. P. 15A

CA

Insecticide SK. A. P. Belikova. *Farmakol. i Toksi-
kol. S, No. 1, 53 (1945).* - Insecticide SK (I), a chlorination
product of pine turpentine, is a thick paste, insol. in water,
slightly sol. in alc., readily sol. in ether and light oils. It
is used in 50% ointments or soap blends to combat lice.
Skin patch tests on 50 mice and 30 rabbits, using muslin
squares soaked in 1% aq. emulsion or alc. soln. of I and
dried, showed no toxicity after 5 days (mice) or 10 days
(rabbits). Undergarments, dipped in 0.5% emulsions of
I in aq. soap soln., were worn 10 days by 3 persons.
Neither skin nor general condition showed any toxicity;
there was no change in blood or urine. Hence I has no
toxic action in normal use, either by direct contact or by
resorption. Julian P. Smith

METALLURGICAL LITERATURE CLASSIFICATION

Cand Med Sci

BELIKOVA, A. P.

Dissertation: "Concerning the Laxative and Constipating Action of the Plants
of Buckwheat Family."
8/6/50

Academy Med Sci USSR

SO Vecheryaya Moskva
Sum 71

BELIKOVA, A.P.; GOLUBOVA, R.Z.; SMIRNOV, V.A.

Determining the extractive value of fruits and berries. Izv.
vys.ucheb.zav.; pishch.tekh. no.6:148-152 '58.

(MIRA 12:5)

1. Leningradskiy tekhnologicheskij institut pishchchevoy promysh-
lennosti, Kafedra tekhnologii spirta i likero-vodochnykh
isdelyiy.

(Fruit--Chemical composition)
(Extraction (Chemistry)) (Fruit juices)

BELIKOVA, A.P.

PIRES, A. I.; KUTUKOVA, K.S.; BELIKOVA, A.P.

Chemotherapy of experimental trypanosomiasis in
prolonged (narcotic) sleep. Zh. mikrobiol., Moskva No.1:
38-39 January 1954. (CML 25:5)

1. Of the Department of Microbiology (Head -- Prof. A.I.
Piras) and the Department of Pharmacology (Head -- Prof.
M.M. Nikolayeva), Moscow Pharmaceutical Institute of the
Ministry of Public Health USSR.

BELIKOVA, A.P.

BELOVA, A.P.; KUDRYAVINA, N.A.; RAMPAN, Yu.I.; SYRKIN, A.B.

Experimental data on the effect of aurantin on the peripheral blood, cardiovascular system, and diuresis. Antibiotiki 5 no.2:44-50 Mr-
Ap '60. (MIRA 14:5)

1. Laboratoriya farmakologii (zav. A.P.Belikova) Instituta eksperimental'noy i klinicheskoy onkologii AMN SSSR.

(ANTIBIOTICS) (CARDIOVASCULAR SYSTEM)
(DIURETICS AND DIURESIS) (BLOOD CELLS)

BELIKOVA, A.P.; KUDRYAVINA, N.A.; RAMPAN, Yu.I.

Pharmacology of antibiotic No.2703. Antibiotiki 6 no.5:412-417
My '61. (MIRA 14:7)

1. Laboratoriya farmakologii (zav. A.P.Belikova) Instituta
eksperimental'noy i klinicheskoy onkologii AMN SSSR.
(ANTIBIOTICS)

BELIKOVA, A.P.; KUDRYAVINA, N.A.; RAMPAN, Yu.I.; SYRKIN, A.B.

Experimental data relative to the pharmacology of hippophaine
(5-hydroxytryptamine hydrochloride. Farm. i toks. 25 no.6:
705-711 N-D '62. (MIRA 17:8)

1. Laboratoriya farmakologii (zav. - kand. med. nauk A.P.
Belikova) Instituta eksperimental'noy i klinicheskoy onkologii
AMN SSSR.

BELIKOVA, A.P.; KUDRYAVINA, N.A.; RAMPAN, Yu.I.; SYRKIN, A.B.

Pharmacology of fumagillin. Antibiotiki 8 no.6:546-550 Je'63
(MIRA 17:3)

1. Laboratoriya farmakologii Instituta eksperimental'noy i
klinicheskoy onkologii AMN SSSR.

BELIKOVA, A.Ya.

Importance of the dry-drop method in serological tests for syphilis.
Vest.ven. i dermat. no.3:57-58 My-Je '56. (MIRA 9:9)

1. Iz Stavropol'skoy kliniki koshnykh i venericheskikh bolezney i
krayevogo vendispansera.
(SYPHILIS--DIAGNOSIS)

FRIDANTSEV, M.V.; BELIKOVA, E.I.; NAZAROV, Ye.G.

Investigation of heat-resistant alloys on an iron-nickel-chromium base. Sbor.trud.TSNIICM no.27:93-138 '62. (MIRA 15:8)
(Iron-nickel-chromium alloys--Thermal properties)

BELIKOVA, E.I., kand.tekhn.nauk; NAZAROV, Ye.G., inzh.

Effect of secondary hardening on the structure and properties of the KhN35VTIU alloy. Metalloved. i term. obr. met. no.7:38-42
л '62. (MIRA 15:6)

1. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii.

(Nickel-chromium-iron alloys--Hardening)

29686-65 EWT(m)/EWA(d)/EWP(t)/FCS(k) MJW/JD
ACCESSION NR: AR5000733 S/0277/64/000/009/0008/0008

SOURCE: Ref. zh. Mashinostroitel'nyye materialy* konstruktii i raschet detaley mashin. Gidroprivod. Otd. vy*p., Abs. 9.48.51 B

AUTHOR: Belikova, E. I.; Nazarov, Ye. G.; Putimtseva, O. I.

TITLE: Effect of alloying elements on the heat resistance of Fe-Ni-Cr alloys

CITED SOURCE: Sb. Legirovaniye staley. Kiyev, Gostekhnizdat USSR, 1963, 115-126

TOPIC TAGS: alloying, iron base alloy, nickel containing alloy, chromium containing alloy/ alloy EI786, alloy EI787, alloy EI812

TRANSLATION: A study has been made of the effect of ^{W, Mo, Al, Ti} and ^B on the hardness, phase composition, microstructure, heat resistance, and industrial properties of alloys based on 15% Cr and 35% Ni, and also the effect of Mn, Si, and C on alloys with the composition (%): 15 Cr, 25 Ni, 3 Ti, 3 W, and 1 Al. Based on results of the investigation, alloys EI786, EI787, and EI812 are

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L 20686-65

ACCESSION NR: AR5000733

suggested. At 750° alloy EI786 has a long term strength limit of $\sigma_{100} = 28-30 \text{ kg/mm}^2$, while alloys EI787 and EI812 have $\sigma_{100} = 30-38 \text{ kg/mm}^2$ and $\sigma_{10000} = 17-19 \text{ kg/mm}^2$.

SUB CODE: MM

ENCL: 00

Card 2/2

L 12639-63

BDS/EWP(q)/EWT(m)

AFFTC/ASD

JD/HW-2

ACCESSION NR: AF3001470

S/0133/63/000/005/0453/0458

63

AUTHOR: Fridantsev, M. R. (Dr. of technical sciences, Professor); Nazarov, Ye. G. (Engineer); Belikova, E. I. (Candidate of technical sciences)

TITLE: Structural transformations in Fe-Ni-Cr-Ti alloy E1787

SOURCE: Stal', no. 5, 1963, 453-458

TOPIC TAGS: Fe, Ni, Cr, Ti, Al, alloy E1787, heat treatment, tempering, soaking, hardening, solid solution, plastic deformation

ABSTRACT: The heat resisting alloy E1787 with a chemical composition of up to 0.08% C, up to 0.6% Si, up to 0.6% Mn; 12-16% Cr, 33-37% Ni, 2-4% W, 2.4-3.2% Ti, 0.7-1.5% Al and up to 0.03% B, was studied at TsNIICChM. Experiments included heat treating and tempering in air and water at temperatures up to 1180C and soaking times up to 2000 hours. It is concluded that the process of hardening consists of three phases. 1) The transformation at 500-650C characterized by the increase in electrical resistance of alloy. 2) The development of aging processes at 650-900C; this phase represents a solid solution of Ni, Fe, and Al with the compound Ni₃Ti. 3) The formation of a stable lamellar or acicular phase of the type (Ni,Fe)₃(Ti,Al) at 900-950C. The formation of this phase at 850-800C is possible only after a long

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ACCESSION NR: AP3001470

soaking, but at 950C it separates immediately from the solid solution. The transformation of structure from the second to the third phase is due to the tendency of the metastable phase to pass into a more stable one. The plastic deformation of the alloy and a higher titanium content accelerates the building of the third phase. Orig. art. has: 13 figures and 2 tables.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 10Jun63

ENCL: 02

SUB CODE: 00

NO REF SOV: 004

OTHER: 000

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BELIKOVA, E.I.; PUTIMTSEVA, O.I.

High-strength, dispersion hardening, low-magnetic iron-chromium-nickel alloys. Sbor. trud TSNIICHM no.35:11-23 '63. (MIRA 17:2)