BAYEV, V., dotsent; AVRAMOV, A., assistant; BOZADZHIYEVA, Ye., assistent
(Sofiya)

Surgical treatment of Itsenko-Cushing syndrome. Khirurgiia no.11:
73-78 '61.
(CUSHING SYNDROME) (ADRENAL GLANDS--EXCISION)   (MIRA 14:12)

BAYEV, V. (Sverdlovsk); BAGAROV, I. (Sverdlovsk)

Economics in the Urals. Vop.ekon.   no.1:154-157 Ja '63.
(MIRA 16:2)
(Sverdlovsk Province—Industrial management—Congresses)

BAYEV, I.A.

PROCESSES AND PROPERTIES INDEX

Preparation of highly dispersed iron. V. A.
BAEV (Zavod. Lab., 1954, 5, 400—407).—Known
methods are described. R. T.

METALLURGICAL LITERATURE CLASSIFICATION

L 23916-66   EWT(m)/EWP(j)   RM

ACC NR: AP6014943   SOURCE CODE: UR/0204/65/005/001/0101/0107

AUTHOR: Tsyskovskiy, V. K.; Bocharov, A. A.; Bayeva, T. Ye.   31

ORG: All-Union Scientific Research Institute of Petrochemical Processes   B
(Vsesoyuznyy nauchno-issledovatel'skiy institut neftekhimicheskikh protsessov)

TITLE: Production of oxyacids from liquid paraffins
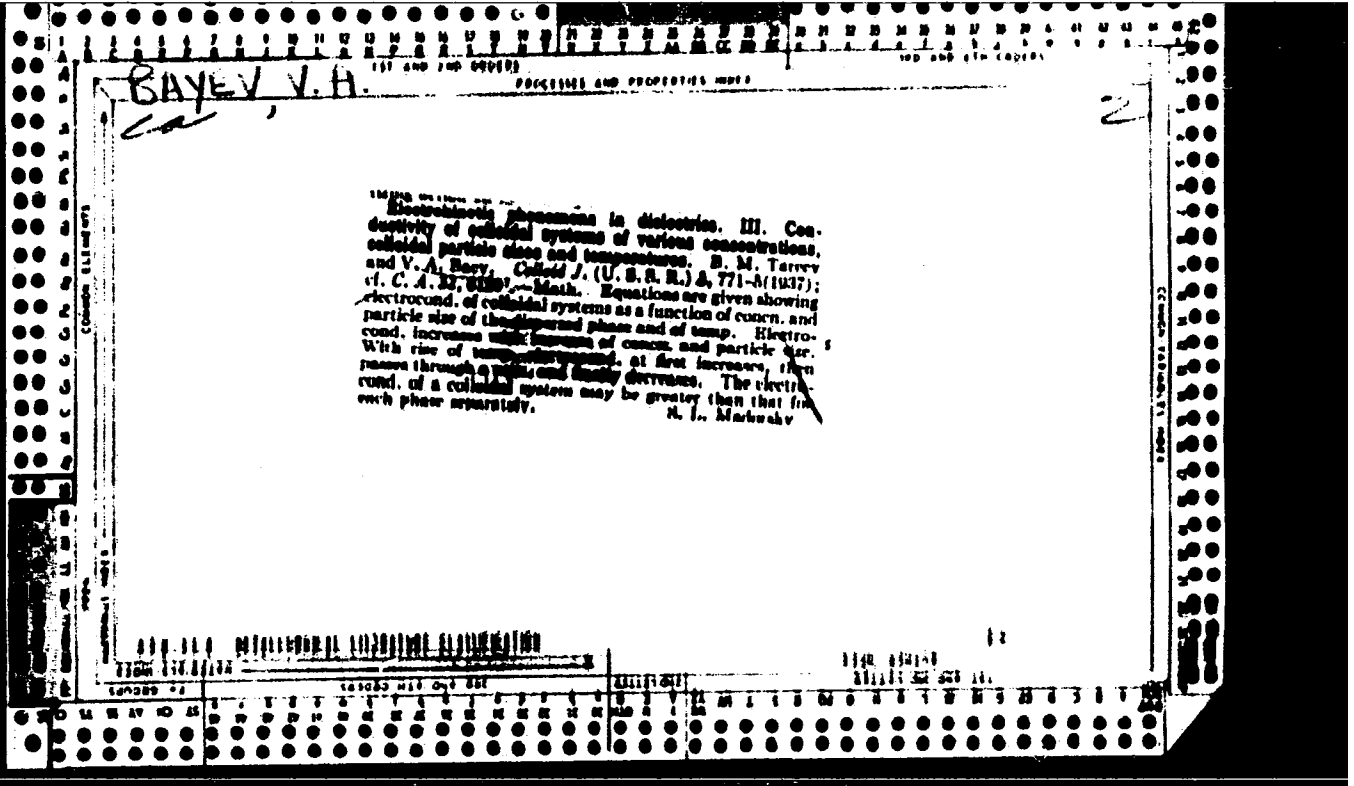
SOURCE: Neftekhimiya, v. 5, no. 1, 1965, 101-107
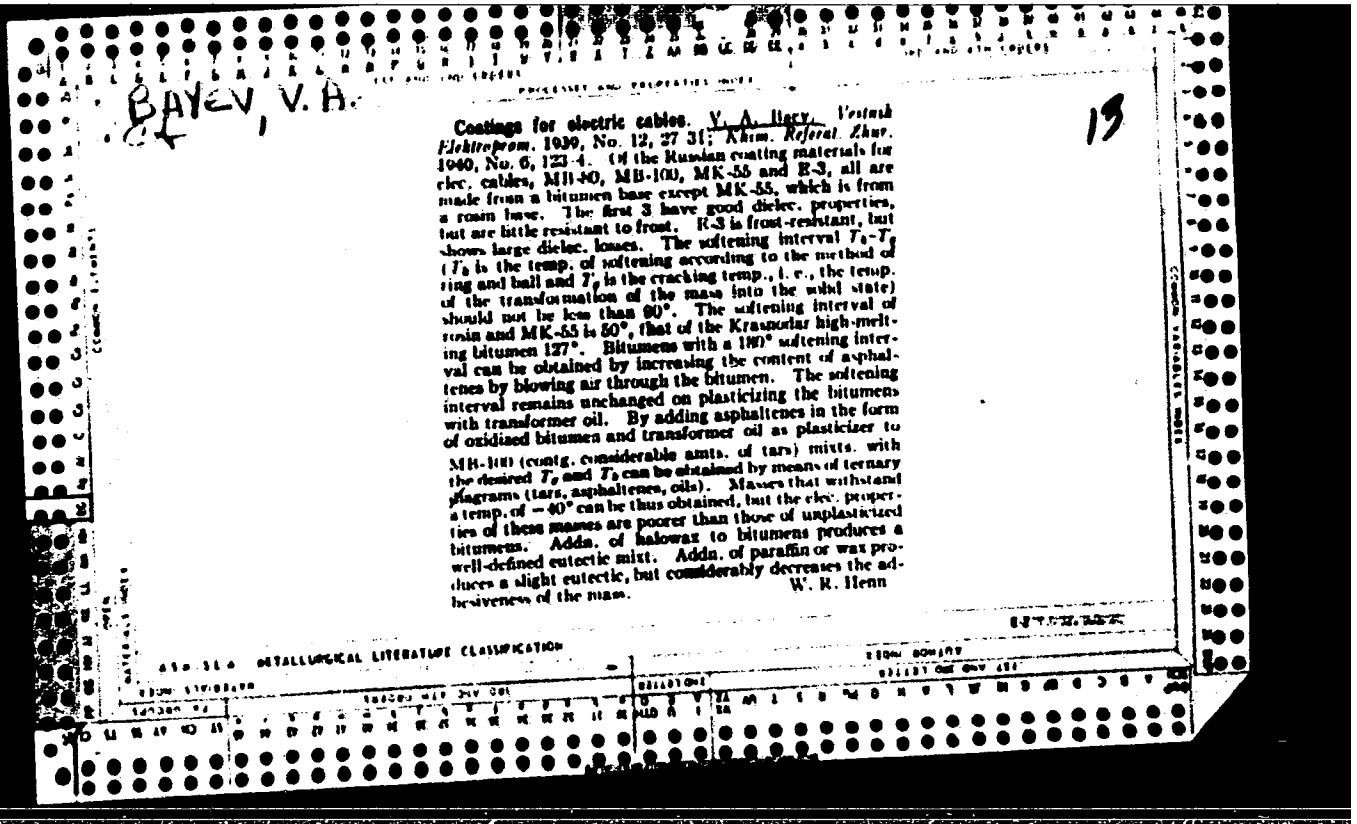
TOPIC TAGS: hydrocarbon, oxidation

ABSTRACT: A one-step process was developed for the production of oxygen-
containing acids by continuous oxidation of liquid paraffins. The paraffins used
consisted mainly of normal C_{14}-C_{22} paraffins, in an effort to produce polyfunctional
aliphatic compounds with a straight chain and at least 19 carbon atoms in the mole-
cule, which are valuable as chemical intermediates. The basic factors of the pro-
cess were studied: continuity of the process, influence of temperature, and
residence time of the raw material in the reaction zone. The optimum conditions of
oxidation, extraction, and indices of the process are presented. The possibility
of producing compounds in 90% yield calculated on the basis of the converted liquid
paraffins, was demonstrated; the products are obtained 99.6% pure, which makes them
valuable intermediates. Orig. art. has: 2 figures and 4 tables. [JPRS]

SUB CODE: 07 / SUBM DATE: 29Apr64 / ORIG REF: 015

Card 1/1 BK   UDC: 661.73:547.47]:66.091:665.521.6-404

BAYEV, V. H.

Electrokinetic phenomena in dielectrics. III. Conductivity of colloidal systems of various concentrations, colloidal particle sizes and temperatures. B. N. Tarrev and V. A. Bayv, Colloid J. (U.S.S.R.) 4, 771-8(1938); cf. C. A. 33, 8380.—Math. Equations are given showing electrocond. of colloidal systems as a function of concn. and particle size of the dispersed phase and of temp. Electrocond. increases with increase of concn. and of temp. With rise of temp. the particle size, at first increases, then passes through a maximum and finally decreases. The electrocond. of a colloidal system may be greater than that for each phase separately.

N. L. Markuzlv

BAYEV, V. A.

13

Coatings for electric cables. V. A. Haev, Vestnik
Elektroprom. 1939, No. 12, 27 31; Khim. Referat. Zhur.
1940, No. 6, 123-4. (Of the Russian coating materials for
elec. cables, MH-30, MB-100, MK-55 and K-3, all are
made from a bitumen base except MK-55, which is from
a rosin base. The first 3 have good dielec. properties,
but are little resistant to frost. K-3 is frost-resistant, but
shows large dielec. losses. The softening interval T_1-T_2
(T_1 is the temp. of softening according to the method of
ring and ball and T_2 is the cracking temp., i. e., the temp.
of the transformation of the mass into the solid state)
should not be less than 90°. The softening interval of
rosin and MK-55 is 50°, that of the Krasnodar high-melt-
ing bitumen 127°. Bitumens with a 180° softening inter-
val can be obtained by increasing the content of asphal-
tenes by blowing air through the bitumen. The softening
interval remains unchanged on plasticizing the bitumens
with transformer oil. By adding asphaltenes in the form
of oxidized bitumen and transformer oil as plasticizer to
MH-100 (contg. considerable amts. of tars) mixts. with
the desired T_1 and T_2 can be obtained by means of ternary
diagrams (tars, asphaltenes, oils). Mixes that withstand
a temp. of −40° can be thus obtained, but the elec. proper-
ties of these masses are poorer than those of unplasticized
bitumens. Addn. of halowax to bitumens produces a
well-defined eutectic mixt. Addn. of paraffin or wax pro-
duces a slight eutectic, but considerably decreases the ad-
hesiveness of the mass.   W. R. Henn

BAYEV, V. A.
Ref. Ubs
V.9

The Use of Aluminium for Reflectors. V. A. Baev (*Tsvet. Metally (Non-Ferrous Metals), 1939, (12), 110-114).- [In Russian.] A review. Chemical etching and electrochemical brightening (Brytal, Alzak) methods of improving the reflectivity of aluminium surfaces are described, and the reflective properties of reflectors obtained by these methods are dealt with.— A. R.

BAYEV, V.A.

BAYEV, V.A., insh.; VARDENBURG, A.K., kand. tekhn. nauk.

Polyamide resins and their use for mold insulation of electric
windings. Vest. elektroprom. 27 no.8:12-16 Ag '56.   (MIRA 10:9)

1. Nauchno-issledovatel'skiy institut Ministerstva elektrotekhniche-
skoy promyshlennosti.
          (Amides)   (Electric insulators and insulation)

BAYEV, V.A., inzhener.;ZAKHAROVA, N.P., inzhener.

Experimental investigation of the capacitance characteristics
of the insulation of low voltage asynchronous electric motors.
Vest. elektroprom. 28 no.1:72-77 Ja '57.   (MIRA 10:4)

1. Nauchno-issledovatel'skiy institut Ministerstva elektrotekhnicheskoy
promyshlennosti.
                    (Electric motors, Induction)

SOV-28-58-4-24/35

AUTHORS: Bayev, V.A., and Orzhakhovskiy, M.L., Engineers

TITLE: Classification of Electric Insulating Materials With Re-
              spect to Heat Resistance (Klassifikatsiya elektroizolyat-
              sionnykh materialov po nagrevostoykosti)

PERIODICAL: Standartizatsiya, 1958, Nr 4, pp 76 - 78 (USSR)

ABSTRACT: The development of new electric insulating materials re-
              quired the revision of existing classification. New stand-
              ards of insulating materials for electric machines, devices
              and transformers have been approved as well as their clas-
              sification with respect to heat resistance. The importance
              of the new standard consists in the clear determination of
              limit temperatures in the continuous utilization of insul-
              ation in electric equipment. The new GOST standard com-
              plies with scientific, technical and industrial require-
              ments. The issue of the standard will entail some modifi-
              cations and additons relating to the existing standards.
              Classification of the new materials is based on experimen-
Card 1/2   tal test methods in accordance with the law of heat-aging.

SOV-28-58-4-24/35

. Classification of Electric Insulating Materials With Respect to Heat
Resistance

    The article mentions some test methods applied for this
    purpose.

ASSOCIATION: NII elektropromyshlennosti (Scientific Research Institute
    of the Electrical Industry)

    1. Electric insulation--Temperature factors 2. Electric insula-
    tion--Classification 3. Electric insulation--Standards

Card 2/2

AUTHORS: Bayev, V.A., Maslov, V.V. and Orzhakhovskiy, M.L.
(all Engineers)

SOV/110-59-9-19/22

TITLE: The Principles   of Humidity Test Conditions on Products
Intended for Tropical Service

ABSTRACT: A great many different recommendations are made about
humidity testing of products for tropical service. It is
desirable to compare the different methods, to see how
products may be most realistically evaluated. Tests
should be of short duration but should not damage the
product. Electrical qualities may be assessed by
measurements of the insulation resistance or the
capacitance of the insulation before and after testing.
Both types of measurement were made in the present work.
The ratio of the capacitance at a frequency of 2 c/s to
that at a frequency of 50 c/s was also measured. The
recommended procedure is to measure the capacitance of
the insulation during the process of humidification and
to determine the relative increase in permittivity of the
insulation. Graphs are then constructed of the increase
in permittivity as a function of humidification time and

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SOV/110-59-9-19/22

The   Principles   of Humidity Test Conditions on Products Intended for Tropical Service

the graphs for machines of normal and tropical design are compared. The humidity testing recommendations of the International Electrotechnical Commission (IEC) are discussed and it is considered that they are of limited value and applicable only to a narrow range of radio components. Accordingly, the objects of the present work were: to determine the best duration of test; to determine the best temperature and duration of accelerated test conditions; and to determine the best cycle of temperature and humidity testing. The tests were made on induction motors types A06 of 10 kW and A04 of 2.8 kW of both normal and tropical constructions. The tropical 10 kW motors had silicone insulation and the normal motors class B insulation. The tropical 2.8 kW motors used glass cloth and flexible micanite as slot insulation, whilst cotton and pressboard were used in the normal motors. Tests were also made on other types of equipment, such as contactors. The humidity and tempera-

Card 2/6 ture chamber is described. Electrical equipment in the chamber was exposed to a relative humidity of 98-100% at temperatures of 20, 40, 55 and 70 °C for 10-30 days.

SOV/110-59-9-19/22

The   Principles   of Humidity Test Conditions on Products Intended
for Tropical Service

       Moreover, at 40 and 55 °C the equipment was exposed to
humidity cycles for 10-20 days. Each cycle lasted 24
hours and consisted of 6 or 18 hours at 98-100% humidity
at the test temperature with subsequent cooling for 18
or 6 hours. These cycles were called 6 - 18 and 18 - 6
respectively. Similar equipment was also exposed under
natural conditions at Shanghai in the wet season. The
climatic conditions are described. Graphs of changes in
permittivity against time during tests in the tropical
testing chamber at various temperatures are given in
Figs 1 to 3. It will be seen that humidity testing for
13 days at 40 °C does not differentiate between tropical
and normal insulation. However, at 55 °C there is an
appreciable difference from the fifth day onwards. The
difference is revealed even more quickly at 70 °C but at
that temperature even the tropical insulation deteriorates
so quickly that the difference diminishes again. It
appears, therefore, best to make the test at 55 °C for
seven days. The temperature at which the equipment is
maintained at 98-100% relative humidity affects the rate

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3/6

SOV/110-59-3-19/22

The   Principles   of Humidity Test Conditions on Products Intended
for Tropical Service

of change of electrical characteristics and is of
considerable interest.   Figs 4 and 5 show graphs of the
increase in permittivity as function of time on
continuous exposure to humidity at various temperatures.
The curves in Fig 6 show the degree of acceleration of
the tests made at high temperature as compared with those
made at 20 °C.   At 70 °C acceleration is by a factor of
about 30, at 55 °C by a factor of 10, and at 40 °C by a
factor of 2.5-3.   It is accordingly recommended that the
best test duration at 40 °C is 21-28 days, assuming that
the best test time at 55 °C is 7 days.   Continuous and
cycled humidity tests are then compared.   It will be seen
from the curves given in Figs 7 and 8 that the conditions
of 18 hours humidity followed by 6 hours cooling are the
most severe.   The recommendation that the humidity tests
should be cyclic and not continuous is confirmed by the
attitude of the Indian Delegation to the Stockholm Session
of the I.E.C. in 1958 and by other published work.   In
Card 4/6   addition to test-chamber results the curves of Figs 4 and
5 show also changes in permittivity during exposure under
natural conditions in Shanghai.   It is concluded that,

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The   Principles   of Humidity Test Conditions on Products Intended for Tropical Service

approximately, a tropical chamber test of 21 days at 40°C with the 16 - 8 cycle is 20-25 times more severe than natural exposure.   Thus the chamber test of 21 days is approximately equivalent to 1-1½ years' natural tropical exposure.   The factors that influence the rate of humidification of insulation are briefly discussed.   The tests may be made at constant relative humidity but different temperatures.   In this connection curve 1 of Fig 6 indicates that as the temperature is raised the rate of humidification increases more rapidly than does the total humidity present.   Tests may also be made at different total humidity at various temperatures, and in this case the lower the temperature the higher the relative humidity.   Also, humidification is then more rapid at the lower temperature.   This was confirmed by tests on stators of normal and tropical construction;   test results are plotted on Figs 9 and 10, to show change of

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SOV/110-59-9-19/22

The   Principles   of Humidity Test Conditions on Products Intended
for Tropical Service

       permittivity as a function of exposure time at given
       absolute but variable relative humidity.
       There are 10 figures and 3 Soviet references.

Card 6/6

BAYEV, V.A., inzh.; MASLOV, V.V., inzh.; ORZHAKHOVSKIY, M.L., inzh.

Performance of electrical equipment designed for operation in tropical climates. Vest. elektroprom. 33 no.7:30-35 Jl '62.

(MIRA 15:11)

(Electric apparatus and appliances)

BAYEV, V.A., inzh.; MASLOV, V.V., inzh.

Polymer synthetic materials should be used on a wider scale. Vest.
elektroprom. 34 no.5:1-3 My '63.   (MIRA 16:5)
                                (Polymers)

BAYEV, V.A., inzh.; ZEYTMAN, S.M., inzh.

For the saving of nonferrous metals in the manufacture of electric apparatus and machinery. Vest.elektroprom. 32 no.8:1-4 Ag '61.
(MIRA 14:8)
(Electric engineering—Materials) (Nonferrous metals)

BAYEV, V.A., inzh.

> Use every means to fulfil the decisions of the December
> Plenum of the Central Committee of the CPSU. Elektrotekhnika
> 35 no.1:1-2 Ja '64.   (MIRA 17:2)

PAYEV, V. K.

PAYEV, V. K. - "Treatment of Gunshot Wounds of the Hip Joint." Sub
3 Jun 52, Central Inst for the Advanced Training of Physicians.
(Dissertation for the Degree of Candidate in Medical Sciences),

SO: Vechernaya Moskva January-December 1952

BAYEV, V.K.

Cecostomy using the stump of appendix vermiformis. Uch.zap.
KRROI 7:12-14'61   (MIRA 16:8)
                    (CECUM—SURGERY)

KOLOMIYCHENKO, M.I., prof.; BAYEV, V.K., dotsent

Surgical treatment of pancreatic cysts. Khirurgiia 38 no.10:
81-89 O '62.   (MIRA 15:12)

1. Iz kliniki obshchey khirurgii (zav. - prof.M.I. Kolomiychenko)
Kiyevskogo meditsinskogo instituta imeni A.A. Bogomol'tsa.
                        (PANCREATIC CYSTS)

BABIY, I. I.

Dissertation: "Free Convection in the Atmosphere."   Cand Phys-Math Sci, Central Inst of
Weather Forecasting, 27 Apr 54.   (Vechernyaya Moskva, Moscow, 15 Apr 54)

SO: SUM 243, 19 Oct 1954

14-57-7-14709

Translation from: Referativnyy zhurnal, Geografiya, 1957, Nr 7,
p 71 (USSR)

AUTHOR: Bayev, V. K.

TITLE: Nonstationary Convection Currents (Nestatsionarnyye
               konvektivnyye techeniya)

PERIODICAL: Tr. Tsentr. in-ta prognozov, 1956, Nr 43 (70), pp 3-18

ABSTRACT: The article explains the construction and solution of
               a problem involving free convection in the atmosphere
               with the help of a special procedural method. The
               author assumes the condition of liquid adhering to the
               enclosing surface and takes the temperature of this
               surface as $\sqrt{} = T_0 f(x, y, t)$, where $\underline{f}$ is a known
               function on the order of one. The condition of com-
               pletely dampened disturbances of velocity and tempera-
               ture is assumed for the limiting layer at $z \rightarrow \infty$.
               Equations of motion, continuity, and heat absorption

Card 1/4

Nonstationary Convection Currents (Cont.)

14-57-7-14709

are reduced to a dimensionless form including a single parameter of the problem $\beta = kl(\gamma l\ g\alpha T_0)^{-2/5}$, representing a dimensionless combination of magnitudes: γ -- the coefficient of turbulent cohesiveness, α -- the coefficient of heat expansion of the medium ($\alpha = 1/273$), k -- the Coriolis parameter, l -- the distance over which all the temperature T_0 changes occur (characteristic distance), and g. Here the coefficient of the turbulent heat conduction is assumed to be equal to γ. The method of solving the system of convection equations is based on the interchange of the variables.

$$\Theta = t\Theta(x,\ y,\ s,\ t,), \qquad u = t^{5/2}\ w\,(x,\ y,\ s,\ t)$$

$$v = t^{5/2}\ \varphi(x,\ y,\ s,\ t,), \qquad w = t^3\ \psi(x,\ y,\ s,\ t),$$

where $s = z/2\sqrt{t}$. For the case of the temperature Θ (x, y, s, t) the author derives the equation:

Card 2/4

Nonstationary Convection Currents (Cont.)

$$\frac{d^2\Theta}{ds^2} + 2s \frac{d\Theta}{ds} - 4\Theta = 4t \frac{d\Theta}{dt} + t^{7/2} \left(2w\frac{d\Theta}{dx} + 2\varphi \frac{d\Theta}{dy} + \psi\frac{dy}{dz}\right).$$

The remaining equations of the investigated system have an analogous structure. Assuming that the function $\underline{f}$ may be transformed into an infinite series

$$f(x, y, t) = t \sum_{o}^{\infty} f_n(x, y)\, t^{n/2},$$

the author searches for the expression for ϑ, w, φ, ψ in the form of analogous series for $t^{1/2}$. In this process he obtains a recurrent system of differential equations for the coefficients of transformation, so that nonlineal members are found in the seventh and further equations. The solutions are expressed by auxiliary functions related to the polynomials of Chebyshev-Hermite. An analogous method is used for solving a more general problem of a
Card 3/4

14-57-7-14709

. Nonstationary Convection Currents (Cont.)

two-layer medium (air-earth) with a given heat balance at the earth's surface. The author presents examples of calculations for the case of $\vartheta = te^{-a\zeta^2}$ (the case of an island in an endless ocean or of a city). He plots the flow lines and the wind profiles at a = 0.1 and at a = 10. In the former case the temperature contrasts are small, the wind involves a layer on the order of 100 m thick, horizontal velocity alters its sign at a certain altitude, and flow lines assume the form of helices on toroidal surfaces. In the latter case horizontal velocity becomes positive at a certain height, flow lines (projected) are not closed, the activity progresses in a more intensive manner and involves a thicker layer. The author also carries out a calcutation of convections at $\vartheta = tthx$ (the case of a breeze). He discovers a sharp drop of temperature following the passage of a breeze front. A maximum horizontal velocity (about 5 m/sec) is reached at a distance of some 15 km from the shore. The height of the disturbed layer is about 1.5 km.
Card 4/4

P. L.

SOV/124-57-9-10497

Translation from: Referativnyy zhurnal, Mekhanika, 1957, Nr 9, p 87 (USSR)

AUTHOR: Bayev, V. K.

TITLE: Nonstationary Convective Flows (Nestatsionarnyye konvektivnyye techeniya)

ABSTRACT: With the help of Blasius' method (the solution is sought in the form of special series with respect to time) the author solves the nonlinear problem of the development of laminar convection generated by a thermal heterogeneity of the underlying surface (the so-called breeze), the temperature of which is either prescribed in an arbitrary manner or is determined from the state of the heat balance (the exact solutions of the breeze problem for certain specific cases of temperature distribution on the underlying surface were obtained by the reviewer [Dokl. Tsentr. in-ta prognozov, 1947, Vol 1, Nr 3; Tr. Tsentr. in-ta prognozov, 1948, Nr 8 (35)]. Without considering the question of the convergence of the solution, the author adduces some velocity profiles calculated for actual cases of the temperature distribution on the surface of the earth. These calculations expose for the first time certain

Card 1/2

Nonstationary Convective Flows

features of thermal convection (for example, the origin of downdrafts over a heated surface) which had previously been experimentally established.

L. N. Gutman

Card 2/2

BAYEV, V.R.

3(7)   PHASE 1 BOOK EXPLOITATION   SOV/3249

Moscow. Tsentral'nyy institut prognozov

Voprosy dolgosrochnykh prognozov pogody (Problems in Long-Range Weather Fore-
   casting) Moscow, Gidrometeoizdat (otd.), 1959. 62 p. (Series: Its:
   Trudy, vyp. 85) Errata slip inserted. 900 copies printed.

Sponsoring Agency: USSR. Sovet ministrov. Glavnoye upravleniye gidro-
   meteorologicheskoy sluzhby.

Ed. (Title page): G. I. Morskiy; Ed. (Inside book): L. V. Blinnikov; Tech.
   Ed.: T. Ye. Zemtsova.

PURPOSE: This issue of the Institute's Transactions is intended for scientific
   research and field workers in meteorology as well as for advanced students in
   schools of higher education.

COVERAGE: This is a collection of three articles in synoptic and general meteorology.
   Two of the articles deal with problems concerning the general circulation of the
   atmosphere while the third discusses the matter of forecasting mean 7-day pres-
   sure maps. References accompany each article.

Card 1/3

Problems in Long-Range (Cont.)

SOV/3249

TABLE OF CONTENTS:

Card 2/3

Problems in Long-Range (Cont.)   SOV/3249

Morskoy, G. I. On the Zonal Circulation of the Atmosphere
    The author restricts himself to those questions related to the formation and
    evolution of the profile of westerly winds. He understands zonal circula-
    tion as a planetary, rather than a regional, phenomenon with like value
    everywhere on the latitude circle. The author gives a detailed history of
    studies made on this question (his bibliography includes 84 items). In
    striving for simplicity in the basic equation the author considers the main
    factors: horizontal displacement, wind departures from the geostrophic, and
    the action of the thermal field. There are 84 references: 33 Soviet,
    39 English, 11 German, and 1 French.
                                                                            40

AVAILABLE: Library of Congress

Card 3/3
                                                                    TM/lsb
                                                                    3-1-60

BAYEV, V.K.

Theory of general atmospheric circulation. Trudy TSIP no.85:
3-16 '59.   (MIRA 12:8)
        (Weather forecasting)

SHALIMOV, Aleksandr Alekseyevich; RED'KIN, Sergey Nikolayevich;
BAYEV, V.K., red.

[Atlas of surgical operations on the organs of the abdomi-
nal cavity] Atlas khirurgicheskikh operatsii na organakh
briushnoi polosti. Kiev, Zdorov'ia, 1965. 422 p.
(MIRA 18:9)

BRODSKIY, Andrey Faustovich; BAYEV, V.K., red.

[Preservation and homotransplantation of tissues] Kon-
servirovanie i gomotransplantatsiia tkanei. Kiev, Zdo-
rov'ia, 1965. 142 p.   (MIRA 18:8)

L 22485-65   EWT(m)   AS(mp)-2/ESD(gs)/DIAAP

ACCESSION NR: AT5001495   S/2759/64/000/006/0043/0050

AUTHOR: Bayev, V. K.; Gass, V. P.   / -

TITLE:. Dynamics of particles in a cylindrical cavity operating at the E_{010} mode

SOURCE: Moscow. Inzhenerno-fizicheskiy institut. Uskoriteli, no. 6, 1964, 43-50

TOPIC TAGS: electron bunching, electron acceleration, electron dynamics, cylindrical cavity, electron beam acceleration

ABSTRACT: The authors calculate the dynamics of longitudinal particle motion in a round cylindrical cavity operating in the E_{010} mode, using a combination of analytic and graphical methods. The electron kinetic energy is determined analytically as a first integral of electron motion, and families of curves are plotted with which to determine the phase-energy relations and the energy spectrum of the electron beam at the output of single cavities and of several cavities in cascade, as functions of the cavity length, the field intensity, and the frequency of the electromagnetic field. A numerical example illustrating the application of the method shows that a monoenergetic electron bunch with phase dimension of $110°$

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L 22485-65
ACCESSION NR: AT5001495

can be accelerated with the aid of a system of three cavities from 50 keV to
1 MeV, thereby reducing its phase dimension to less than 10⁰ and retaining its
monoenergetic character. Orig. art. has: 9 figures and 4 formulas.

ASSOCIATION: Inzhenerno-fizicheskiy institut, Moscow (Engineering-Physics
Institute)

SUBMITTED: 00   ENCL: 00   SUB CODE: EC, NP

NR REF SOV: 001   OTHER: 005

Card 2/2

ACC NR: AP6030933   SOURCE CODE: UR/0207/66/000/004/0145/0149

AUTHOR: Bayev, V. K. (Novosibirsk)

ORG: none

TITLE: Criterial description of the flame geometry of a homogeneous mixture

SOURCE: Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki, no. 4, 1966, 145-149

TOPIC TAGS: combustion, ramjet combustion, combustion chamber, combustor, combustion mechanism

ABSTRACT: The generalization of experimental data on combustion in burners of various designs is important for designing new combustion chambers with the aid of previously published experimental material. Therefore, in this study, a dimensionless parameter based on the energy equation was derived for use in correlating flame lengths with other flow parameters in burners of various geometries. It was shown that the dimensionless flame length X can be correlated with the parameter B_1 by the equation $X = c B_1^n$, where

$$B_1 = \frac{u_0 a_0}{u_n^2 d}(\theta_0 + 1)^{1.6};$$

u_0 is the initial flow velocity; u_n, normal burning velocity; a, thermal conductivity; d, burner diameter; and θ_0 is the dimensionless temperature. Plots of log X vs B_1 gave straight lines for experimental data obtained previously in various burners at

Card 1/2

L 08216-67

ACC NR: AP6030933   3

initial temperatures of 20—600C, at flow velocities up to 160 m/sec, and at various
air excess coefficients. Correlations were made of data obtained by Rauschenback
with a ramjet combustor using a trough shaped flame holder and gasoline fuel, by
Andreyev in a tunnel furnace using a utility gas-air mixture, and by Kozachenko
with a square burner using a utility gas-air mixture. The parameter B_1 can be also
used for calculating the maximum flame length at flame blow-off and the minimum
length at flash-back. Orig. art. has: 9 formulas and 4 figures.   [PV]

SUB CODE: 21/ SUBM DATE: 31Jan65/ ORIG REF: 008/ OTH REF: - 001/

Card 2/2

BAYEV, V.M.; RYABOV, R.A.

Kinetics of the separation of hydrogen from steel. Trudy Ural.
politekh. inst. no.92:110-113 '59.   (MIRA 13:12)
        (Steel—Hydrogen content) (Diffusion)

S/137/61/000/012/115/149
A006/A101

AUTHOR: Bayev, V.M.

TITLE: The effect of structure on hydrogen diffusion in carbon steel

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 12, 1961, 2, abstract 12Zh12
             ("Tr. Ural'skogo politekhn. in-ta", 1961, no. 114, 138 - 143)

TEXT: The diffusion process was studied by measuring the rate of H desorp-
tion from a cylindrical У -12 (U-12) steel specimen (5 mm in diameter, 70 mm
height). The specimen was charged with H by the method of cathode polarization,
and was then placed into a quartz tube connected with a vacuum system of pumping
and measuring units. Desorption was studied within a temperature range of 500-
700°C. Specimens were prepared having a perlite microstructure with a normal
and a "torn" cementite network. H diffusion is noticeably higher in the latter
than in the former structure. The activation energies are close for both cases,
since diffusion proceeds over the same structure (ferrite). The diffusion factor
for perlite with a torn cementite network is equal to $(2.07-3.04).10^4$ cm^2/min

Card 1/2

The effect of structure ...

S/137/61/000/012/115/149
A006/A101

within $473 - 675^{\circ}C$, and for perlite with a normal cementite network it is $(1.52-1.82).10^{4}$ cm^{2}/min within $590 - 685^{\circ}C$.

A. Rusakov

[Abstracter's note: Complete translation]

Card 2/2

L 36357-66 EWT(1)

ACC NR: AP6005312   SOURCE CODE: UR/0413/66/000/001/0046/0047

INVENTOR: Bayev, Ye. F.; Burylin, Ye. I.; Snezhko, Yu. V.; Shershunova, S. I.

ORG: none

TITLE: Delay line with inductive elements containing ferromagnetic toroidal cores. Class 21, No. 177496

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 1, 1966, 46-47

TOPIC TAGS: delay line, ferromagnetic material, inductive element

ABSTRACT: An Author Certificate has been issued for a delay line with inductive elements containing ferromagnetic toroidal cores. To obtain the optimum coupling coefficient of inductive elements of the delay line, these ferromagnetic cores have four protrusions located in pairs

Card 1/2   UDC: 621.374.5

L 36357-66

ACC NR: AP6005312

O

on both toroidal sides diametrically opposite to each other, one above the other (see Fig. 1). Orig. art. has: 1 figure.
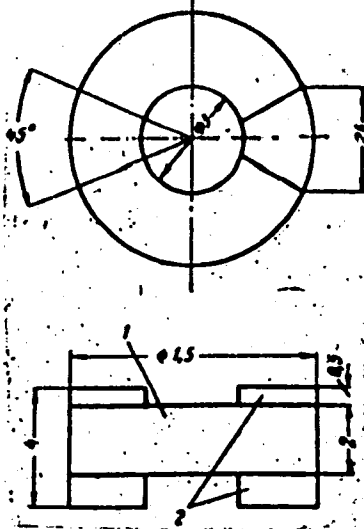
[NT]

Fig. 1. Delay line with inductive elements containing ferromagnetic feroidal core. 1—toroid; 2—protrusions.

SUB CODE: 09/ SUBM DATE: 06Apr64

Card 2/2

KIRILLOV, Ivan Aleksandrovich; BAYEV, Yevg., red.; ISUPOVA, N.,
        tekhn. red.

    [Wonderful peninsula] Udivitel'nyi poluostrov. Simferopol',
    Krymizdat, 1963. 92 p.   (MIRA 16:10)
            (Crimea—Economic geography)

YEREMEYEVA, Yelena Mikhaylovna; BAYEV, Yevg., red.

[The Black Sea] Chernoe more. Simferopol', Izd-vo
"Krym," 1965. 107 p.   (MIRA 18:7)

KHOKHRYAKOV, Yuriy Alekseyevich; BAYEV, Yevg., red.

[Southern shore of the Crimea] IUzhnyi bereg Kryma.
Simferopol', Izd-vo "Krym," 1964. 158 p.
                                    (MIRA 17:10)

SHANTYR', Sergey Pavlovich; BAYEV, Yevg., red.

[Miskhor, Koreiz, Gaspra; a regional study] Miskhor,
Koreiz, Gaspra; kraevedcheskii ocherk. Simferopol',
Izd-vo "Krym," 1964. 147 p.   (MIRA 18:1)

KOKHANOVICH, Mikhail Vasil'yevich, prof., doktor med. nauk;
    BAYEV, Yevg., red.

[Mineral waters of the Crimea; their therapeutic sig-
nificance] Mineral'nye vody Kryma; ikh lechebnoe zna-
chenie. Simferopol', Krym 1964. 171 p.   (MIRA 18:1)

BRUSILOVSKIY, Isaak Abramovich; MILOSLAVSKIY, Vilen Naumovich;
    BAYEV, Yevg. , red.

    [Saki; an historical regional study] Saki; istoriko-
    kraevedcheskii ocherk. Simferopol', Krymizdat, 1964.
    79 p.   (MIRA 17:6)

YENA, Vasiliy Georgiyevich, kand. geogr. nauk; BAYEV, Yevg.,
        red.

    .Landform monuments] Landshaftnye pamiatniki. Simferopol',
    Izd-vo "Krym," 1964. 74 p.   (MIRA 17:10)

VOLOSHIN, Mikhail Petrovich, kand. biol. nauk; BAYEV, Yevgeniy, red.

[Parks of the Crimea] Parki Kryma. Simfa opol', Izd.-vo "Krym," 1964. 158 p. (MIRA 17:10)

FILIPPOV, Valentin Vasil'yevich; BAYEV, Yevg., red.; FISENKO, A., tekhn. red.

[In the main direction]Na glavnom napravlenii. Simferopol', Krymizdat, 1961. 27 p.   (MIRA 15:11)

1. Sekretar' partiynogo komiteta kolkhoza "Rossiya" Krasno-gvardeyskogo rayona (for Filippov).
 (Krasnogvardeyskoye District--Collective farms--Management)

GRIGOR'YEV, Nikolay Nikolayevich; SEVERINOV, Sergey Stepanovich;
  BAYEV, Yevg., red.

[Yevpatoriya, the city of sun; a brief essay on the
history of the town. A device for guests at Yevpatoriya
Health Resort. For whom treatment at Yevpatoriya is
recommended] Evpatoriia, gorod solntsa; kratkii rasskaz ob
istorii goroda. Sovety otdykhaiushchim na evpatoriiskom
kurorte. Komu rekomendovano lechenie v Evpatorii. Simfe-
ropol', Izd-vo "Krym," 1965. 140 p.   (MIRA 18:11)

BAYEVA, A. I.

"The Effect of Organic Fertilizers in the Liming of Meadow-Podzolic Soils on the Yield of Agricultural Plants." Cand Agr Sci, Inst of Socialized Agriculture, Acad Sci Belorussian SSR, Minsk, 1954. (KL, No 2, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (13)
SO: Sum. No. 598, 29 Jul 55

BAYEVA, A.I.

Liming sod-podzolized soils as a factor of increasing efficiency of manure. O. K. Kedrov-Zikhman and A. I. Baeva. *Pochvovedenie* 1955, No. 1, 25-32.—Lime is more effective in decreasing mobile Al compd. and raising the pH than manure. By adding lime, the quantity of manure can be reduced to 1/3 without decreasing the yield. I.S.L. *(1)*

BAYEVA, A.I.

Uranium content in the mountain Chernozem soils of Kedabek District (the Lesser Caucasus). Izv.AN Azerb.SSR.Ser.biol.nauk no.5:89-93 '64.

(MIRA 18:4)

BAYEVA, A.I.

Natural radioactivity of soils in the Nakhichevan' A.S.S.R.
Trudy Inst. pochv. i agrokhim. AN Azerb.SSR 22:149-157 '64.

(MIRA 18:11)

MARKUSHEVICH, Aleksey Ivanovich; BAYEVA, A.P., red.

[Integral functions; an elementary outline] TSelye
funktsii; elementarnyi ocherk. Moskva, Nauka, 1965.
106 p.   (MIRA 18:7)

VULIKH, Boris Zakharovich; BAYEVA, A.P., red.

[Short course in the theory of functions of real variables]
Kratkii kurs teorii funktsii veshchestvennoi peremennoi.
Moskva, Nauka, 1965. 304 p.   (MIRA 18:8)

EYLER, Leonard [Euler, Leonhard]; FRANKL', F.I. [translator]; BATEVA, A.P., red.; MURASHOVA, N.Ya., tekhn.red.

[Integral calculus] Integral'noe ischislenie. Moskva, Gos. izd-vo fiziko-matem.lit-ry. Vol.3. 1958. 448 p. [Translated from the Latin]

(Calculus, Integral)

(MIRA 12:1)

KUROSH, Aleksandr Gennadiyevich; BAYEVA, A.P., red.; BRUDNO, K.F., tekhn.red.

[Course in higher algebra] Kurs vysshei algebry. Izd.6, perer. i dop. Moskva, Gos.izd-vo fiziko-matem.lit-ry, 1959. 431 p.

(Algebra)   (MIRA 13:2)

PONTRYAGIN, Lev Semenovich; BOLTYANSKIY, V.G., red.; BAYEVA, A.P., red.;
YERMAKOVA, Ye.A., tekhn. red.

[Ordinary differential equations] Obyknovennye differentsial'nye
uravneniia. Moskva, Gos. izd-vo fiziko-matem. lit-ry, 1961. 311 p.
(MIRA 14:7)

(Differential equations)

MERKIN, David Rakhmil'yevich; BAYEVA, A.P., red.; PLAKSHE, L.Yu., tekhn. red.

[Algebra of free and sliding vectors] Algebra svobodnykh i skol'-ziashchikh vektorov. Moskva, Fizmatgiz, 1962. 163 p.
(MIRA 15:5)
(Vector analysis)

SHREYDER, Yuliy Anatol'yevich; BAYEVA, A.P., red.; PLAKSHE, L.Yu.,
tekhn. red.

[What is distance?] Chto takoe rasstoianie? Moskva, Fiz-
matgiz, 1963. 75 p. (Polupliarnye lektsii po matematike,
no.38)
                                              (MIRA 17:2)

POSTNIKOV, Mikhail Mikhaylovich; BAYEVA, A.P., red.; AKSEL'ROD, I.Sh.,
tekhn. red.

[Galois theory]Teoriia Galua. Moskva, Fizmatgiz, 1963. 218 p.
(MIRA 16:4)
(Fields, Algebraic)

FUKS, Boris Abramovich; SHABAT, Boris Vladimirovich; BAYEVA, A.P.,
red.

[Functions of complex variables and some of their applica-
tions] Funkt ii kompleksnogo peremennogo i nekotorye ikh pri-
lozheniia. Izd.3. Moskva, Izd-vo "Nauka," 1964. 387 p.
(MIRA 17:6)

ZAYTSEV, Ivan Lazarevich; BARANENKOV, G.S., red.; BAYEVA, A.P., red.

[Elements of higher mathematics for technical schools]
Elementy vysshei matematiki dlia tekhnikumov. Izd.7., perer. Moskva, Nauka, 1964. 422 p. (MIRA 17:10)

VENTTSEL', Yelena Sergeyevna; BAYEVA, A.P., red.

[Elements of dynamic programming] Elementy dinamiche-
skogo programmirovaniia. Moskva, Izd-vo "Nauka," 1964.
173 p.
(MIRA 18:2)

VENTTSEL', Yelena Sergeyevna; BAYEVA, A.P., red.; DONCHENKO, V.V.,
red.

[Theory of probability] Teoriia veroiatnostei. Izd.3., ispr.
Moskva, Nauka, 1964. 576 p.   (MIRA 18:3)

MESHALKIN, Ye.N.; SERGIYEVSKIY, V.S.; FEOFILOV, G.L.; SAVINSKIY, G.A.;
BAYEVA, A.V.

First attempts at the surgical treatment of bronchial asthma by
the autotransplantation of the lungs. Eksper. khir. i anest. 9
no.6:26-33 N-D '64.

(MIRA 18:7)

1. Institut eksperimental'noy biologii i meditsiny (nauchnyy
rukovoditel' - prof. Ye.N.Meshalkin; direktor - dotsent Yu.I.
Borodin) Ministerstva zdravookhraneniya RSFSR, Novosibirsk.

69787

24.2410
5.3700(B)

S/055/59/000/06/13/027
B006/B005

AUTHORS: Ignat'yeva, L. A., Bazhulin, P. A., Bayeva, I. K.

TITLE: The Integral Intensities of Infrared Absorption Bands in the Series of $(CH_3)_nSiCl_{4-n}$ Compounds

PERIODICAL: Vestnik Moskovskogo universiteta. Seriya matematiki, mekhaniki, astronomii, fiziki, khimii, 1959, No. 6, pp. 127 - 130

TEXT: This article reproduces a report delivered at the Conference on Chemistry and Use of Organosilicon Compounds in September 1958. The results of infrared absorption spectrum investigations are listed in a table, and subsequently described in detail. To exclude intermolecular interactions, the spectra of the gaseous compounds were recorded at low pressures. The spectra were registered by means of a split-beam infrared spectrometer of the type IKS-2 in the range of from 4,000 to 530 cm^{-1}. A bismuth bolometer with a sensitivity of 25 v/w was used as a radiation receiver. To avoid distortions of the band form, recording was carried out at small velocities. The samples were placed in glass cuvettes, 45 and 100 mm long, with a KCl window. Vapor pressure was measured by a mercury

Card 1/3

69787

The Integral Intensities of Infrared Absorption Bands   S/055/59/000/06/13/027
in the Series of $(CH_3)_n SiCl_{4-n}$ Compounds   B006/B005

manometer. The experiments were carried out at pressures of 4 and 10 torr (i.e.
1-10% of the saturation pressure). Cuvettes evacuated to 5.10^{-3} torr were
introduced for compensation into the second channel of the spectrometer. The

integral absorption coefficient $A = \int_{-\infty}^{+\infty} \alpha_\nu d\nu$, where α_ν is the absorption coef-

ficient referring to unit length and pressure, was used as a measure for the
integral absorption intensity. It was possible to measure the pressure with an
accuracy of 10-15%. Without corrections, the total error of intensity measure-
ment was 20-25%. Results (ν in cm^{-1}):

Card 2/3

69787

The Integral Intensities of Infrared Absorption Bands   S/055/59/000/06/13/027
in the Series of $(CH_3)_nSiCl_{4-n}$ Compounds   B006/B005

Substance

	symmetr. valency-CH_3		asymmetr. valency-CH_3		symmetr. deformation-CH_3		Oscillation type symmetr. valency Si-C		asymmetr. valency Si-C		asymmetr. valency Si-C	
	ν	A	ν	A	ν	A	ν	A	ν	A	ν	A
$(CH_3)SiCl_3$	2920	48	2985	103	1266	310	764	490	-	-	575	458
$(CH_3)_2SiCl_2$	2920	100	2980	170	1264	370	691	220	804	407	538	258
$(CH_3)_3SiCl$	2905	145	2975	280	1261	415	631	105	761	239	-	-
$(CH_3)_4Si$	2900	210	2970	360	1259	500	-	-	690	225	-	-

M. I. Batuyev, A. D. Petrov, V. A. Ponomarenko, and A. D. Matveyeva are mentioned.
There are 1 table and 4 references, 1 of which is Soviet.

ASSOCIATION: Kafedra optiki (Chair of Optics)

SUBMITTED: April 23, 1959

Card 3/3

15.8170
5.5310

37771
S/661/61/000/006/062/081
D243/D302

AUTHORS: Ignat'yeva, L. A., Bazhulin, P. A. and Bayeva, I. K.

TITLE: The intensities of the infrared absorption bands of sili-
co-organic compounds of the series $(CH_3)_n SiCl_{4-n}$

SOURCE: Khimiya i prakticheskoye primeneniye kremneorganicheskikh
soyedineniy; trudy konferentsii, no. 6: Doklady, diskus-
sii, resheniye. II Vses. konfer. po khimii i prakt. prim.
kremneorg. soyed., Len. 1958. Leningrad Izd-vo AN SSSR,
1961, 277-282

TEXT: The authors studied the integral intensities of the infrared
absorption bands of the above compounds, where n = 1,2,3,4, and fol-
low the change of intensity and frequency of the absorption bands
for separate bonds in the molecule when Cl's were substituted by
CH_3 groups. All investigations were carried out in the vapor phase
at low pressures to exclude intermolecular reactions. The spectra
were recorded with a two-ray ИКС-2 (IKS-2) infrared spectrometer

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The intensities of ... .
S/661/61/000/006/062/081
D243/D302

in the region 4000 to 530 cm^{-1}, a bismuth bolometer acting as ra-
diation receiver and the spectra being recorded at low speeds to
avoid distortion. The experiments were carried out at 4 mm and 10
mm pressures. The average error in measuring the integral intensity
was 20 - 25%. A. L. Smith's interpretation of the I-R absorption
bands was accepted but the 761 cm^{-1} frequency band was taken as the
valence asymmetric oscillation of Si-C in $(CH_3)_3SiCl$. The results
are given in tabulated form and show the characteristic changes
which occur. It is suggested that the rise in intensity of the Si-C
oscillation may be due to the large difference in electronegativity
between the Si atoms (1.8) and the Cl atoms (3.0), which increases
the dipole moment of the Si-C bond. Reference is made to the work
of M. I. Batuyev, A. D. Petrov, V. A. Ponomarenko and A. D. Mat-
veyeva in this connection. Also, with a high number of chlorine
atoms in the molecule, changes in dipole moment of the Si-Cl bonds
may have an induction effect on the Si-C bonds, and cause the os-
cillation intensity of the latter to rise. There are 1 table and 4
references: 1 Soviet-bloc and 3 non-Soviet-bloc. The references to

Card 2/3

The intensities of ...

S/661/61/000/006/062/081
D243/D302

the English-language publications read as follows: T. Shimanouchi, I. Tsuchiya and Y. Mikawa, J. Chem. Phys., 18, 1306, (1950); I. Duchesne, J. Chem. Phys., 16, 1006, (1948).

ASSOCIATION: Moskovskiy gosudarstvenny universitet im. L. V. Lomonosova (Moscow State University im. M. V. Lomonosov)

Card 3/3

KOPTYUG, V.A.; VOLODARSKIY, L.B.; BAYEVA, I.K.

Use of ultraviolet and infrared spectra for determining the structure
of condensation products of N-(1-oximino-1,2,3,4-tetrahydro-2-naphthyl)
hydroxylamine with aromatic aldehydes. Zhur.ob.khim. 34 no.1:151-157
Ja '64.   (MIRA 17:3)

1. Novosibirskiy institut organicheskoy khimii Sibirskogo otdeleniya
AN SSSR.

KOPTYUG, V.A.; BAYEVA, I.K.; SHUBIN, V.G.; KORCHAGINA, D.V.;
        KOMAGOROV, A.M.; REZVUKHIN, A.I.

        Infrared spectra of protonated aromatic hydrocarbons. Izv.
        AN.SSSR.Ser.khim. no. 5:948 My '64.   (MIRA 17:6)

        1. Novosibirskiy institut organicheskoy khimi Sibirskogo
        otdeleniya AN SSSR.

KOPTYUG, V.A.; SHUBIN, V.G.; BAYEVA, I.K.; KORCHAGINA, D.V.; KOMAGOROV,
A.M.; REZVICHIN, A.I.

Complexes of aromatic hydrocarbons with metal halides and hydrogen
halides. Part 3: Infrared absorption spectra of complexes formed
by methylbenzene with aluminum bromide and hydrogen bromide.
Zhur. ob. khim. 35 no.6:1111-1116 Je '65.   (MIRA 18:6)

1. Novosibirskiy institut organicheskoy khimii.

BAYEVA, I.Ya.

Peculiarities in the course of bacillary dysentery associated
with pathogenic protozoa. Zdrav.Turk. 2 no.1:23-27 Ja-F
'58. (MIRA 12:6)

1. Iz Ashkhabadskoy gorodskoy infektsionnoy bol'nitsy No.2
(glavnyy vrach - I.Ye.Bayeva)
(DYSENTERY)   (PROTOZOA, PATHOGENIC)

BAYEVA, I.Ye.; SILANT'YEVA, Ye.V.; GAZAL'YAN, S.I.; KRASKOVA, N.I.; SHAYKHULINA, N.N.; SINEL'NIKOV, N.A.

Use of a decoction of Alhagi camelorum for the treatment of dysentery. Zdrav.Turk. 3 no.3:46-48 My-Je '59. (MIRA 12:11)

1. Iz kafedry mikrobiologii (zav. - dotsent A.I.Koval'chuk) Turkmenskogo meditsinskogo gosudarstvennogo instituta im. I.V. Stalina i infektsionnoy bol'nitsy Leninskogo rayona Ashkhabada (glavnyy vrach - I.Ye.Bayeva).
                    (DYSENTERY)
                    (ALHAGI CAMELORUM--THERAPEUTIC USE)

BAIEVA, Laborantka (Rostov-na-Domu)

Mutual help and strict inspection are required. Stroi. truboprov.
7 no.1:24 Ja '62.   (MIRA 16:7)

1. Polevaya laboratoriya stroitel'nogo uchastka No.5 tresta
Yuzhgazprovodstroy.
          (Pipelines)   (Protective coatings)

BAYEVA, M.N.

DIMITROV, M.K. (Bolgariya, Sofiya, ul. "N.Gogol", No.1); BAYEVA, M.N.

Remote therapeutic effect and hyperergic reaction in radiotherapy
of a malignant melanoma [with summary in English] Vop.onk. 4 no.1:
111-112 '58.   (MIRA 11:4)

1. Iz okruzhnogo inkologicheskogo dispansere (glavnyy vrach -
M.K.Dimitrov) Soviya, Bolgariya.
              (RADIOTHERAPY, in var. dis.
                  melanoma, ther. eff. & hyperergic reaction (Rus))
              (MELANOMA, therapy,
                  skin, x-ray ther., eff. & hyperergic reaction (Rus))
              (SKIN NEOPLASMS, therapy,
                  melanoma, x-ray ther., eff. & hyperergic reaction (Rus))

USSR/Cultivated Plants. Potatoes, Vegetables, Melons.   M

Abs Jour: Ref Zhur-Biol., No 17, 1958, 77689.

Author : Dayeva, M.V.
Inst   : Crimea Agricultural Institute.
Title   : Raising Winter Cabbage in the Southern Littoral of
          Crimea.

Orig Pub: Tr. Krymsk. s.-kh. in-ta, 1957, 4, 249-255.

Abstract: In 1952-1954 the Derbentskaya, Koporka Odessa and
          Sudya varieties of cabbage were tested; the most
          promising proved to be Derbentskaya. It is recom-
          mended to plant seeds for germination in ground
          ridges from 15 to 30 of September, to set the plants
          in a permanent place from 25 October to 10 November.
          The best predecessors are perennial grasses; with
          good preparing of the soil with organic fertilizers,

Card   : 1/2

71

KIRPICHNIKOV, P.A.; TARASOVA, Z.N.; BAYEVA, N.A.; FEDOROVA, T.V.

Sulfur-containing polyphosphites and their use as stabilizers
of butadiene-styrene rubbers. Vysokom. soed. 7 no.8:1368-1372
Ag '65.   (MIRA 18:9)

Kazanskiy khimiko-tekhnologicheskiy institut imeni S.M.
Kirova, i.Nauchno-issledovatel'skiy institut shinnoy promyshlennosti.

L 64556-65   EST(m)/EPF(c)/EWP(j)   RM

ACCESSION NR: AP5020968   UR/0190/65/007/008/1368/1372
                                 678.01:54+678.742+678.86

AUTHOR: Kirpichev ... I. A.; Tarasov ... Z. N.; Boye..., N. A.; I...

... Polyphosphites ...

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 7, no. 8, 1965, 1368-1372

TOPIC TAGS: synthetic rubber, butadiene styrene rubber, inorganic synthesis, inorganic anion, sulfide phosphite, phosphorous acid, hydrolysis, ... strength, synergy ... bicyclic strength agent, SKS-30 ARKM rubber

ABSTRACT: More effective hydrolysis-resistant stabilizers for polymers are required. Hydrolysis-resistant polyphosphites were synthesized by ester inter-change of equimolar amounts of aryl esters of phosphorous acid with alkylated dihydroxydiphenyl sulfides. The syntheses were conducted in two stages-- at atmospheric pressure, then under vacuum. The products were very viscous or hard powderable yellow materials, soluble in benzene, chloroform, and dioxane. They were oxidized to polyphosphates with oxygen, and formed thiopolyphosphates

Cord 1/2

L 64556-65
ACCESSION NR: AP5020968

7

on heating with powdered sulfur. Polyphosphites based on
4,4'-dihydroxy-2,2'-dimethylsulfide and 4,4'-dihydroxy-3,3'-dimethylsulfide
hydrolysed very slowly and the product with 4,4'-dihydroxy-2,2'-dimethyl-
5,5'-di-tert. butyldiphenyl sulfide (I) was almost insoluble. When tested as anti-
fatigue agents in filled and unfilled butadiene-styrene SKS-30 ARKMP rubber they
were more effective than Neozon D. They displayed a synergistic effect in
admixture with Neozon D. The product of I with triphenylphosphite was especially
effective. Orig. art. has 3 tables and 1 equation.

ASSOCIATION: Kazanskiy khimiko-tekhnologicheskiy institut im. S. M. Kirova
(Kazan Chemical Engineering Institute); Nauchno-issledovatel'skiy institut shinnoy
promyshlennosti   (Scientific Research Institute for the Tire Industry)

SUBMITTED: 14Sep64   ENCL: 00   SUB CODE: GC, MT

NR REF SOV: 007   OTHER: 003

Card 2/2

ACC NR: AP7001964   (N)   SOURCE CODE: UR/0120/66/000/006/0204/0206

AUTHOR: Bayeva, N. N.; Danilova, N. P.; Shal'nikov, A. I.

ORG: Physics Department MGU (Fizicheskiy fakultet MGU)

TITLE: Cryogenic ultrahigh-vacuum pump

SOURCE: Pribory i tekhnika eksperimenta, no. 6, 1966, 204-206

TOPIC TAGS: vacuum pump, ultrahigh vacuum pump, cryogenic vacuum pump

ABSTRACT: A simplified version of a cryogenic ultrahigh-vacuum pump has been de-
signed, built, and tested. The pump can evacuate the working chamber to
a pressure below 10^{-6} torr. Backstreaming at a rate of about 0.01 mm^3/sec
was found to have no effect on the pump performance. With a total capacity
of about 25ℓ, introduction of 0.03 cm^3 of gaseous helium did not increase
the chamber pressure above 10^{-6} torr. Apparently most of the helium was
absorbed by the walls cooled by liquid helium. Orig. art. has: 1 figure.

SUB CODE: 14, 20, SUBM DATE: 01Dec65/ ORIG REF: 002/ ATD PRESS: 5112

Card 1/1   UDC: 621.528.4

SOV/106-58-10-7/13

AUTHOR: Bayeva, N. N.

TITLE: Investigation of the Mean Power of a Multi-Channel Signal
            in Symmetrical-Cable Apparatus (Issledovanie sredney
            moshchnosti mnogokanal'nogo signala apparatury
            simmetrichnogo kabelya)

PERIODICAL: Elektrosvyaz', 1958, Nr 10, pp 47 - 53 (USSR)

ABSTRACT: At the present time, a wide investigation into the
            operating conditions of high-frequency telephone and
            telegraph systems is being undertaken by the TsNIIS
            .И   ., together with LEIS   and NIITS   , in
            which the author of this article is participating. One
            of the problems in this large undertaking is determination
            of the mean power of signals in a group path.   This is
            the subject of this article. The power transmitted along
            a group path is characterised by the instantaneous and
            mean values. This power is fundamental for determination
            of the non-linear interference and the mean power trans-
            mitted along a single telephone channel. The latter
            value is also fundamental for determination of the level
Card 1/3   of cross-talk interference in multi-pair cables. For
            determination of the mean power of a multi-channel signal

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two methods can be used. In the first the mean power of a single channel is determined and then the mean power of the multi-channel signal is found analytically. In the second method, the mean power of the multi-channel signal is measured directly and then the mean power of a single channel found analytically. In this investigation, the second method was used. Measurements were produced using a thermo-ammeter designed to measure small values of alternating current. The apparatus consisted of three thermocouples with different ranges: 0 - 2 mA; 0 - 10 mA; 0 - 50 mA; and a d c indicator. The integration time of the apparatus was 2.5 seconds. The apparatus was connected in series with the output of the transmitter amplifier or at the output of the receiver amplifier and consequently measured the current flowing at the outputs of the given amplifiers. In all eight different systems of types K-12 and K-24 were investigated. The mean power transmitted along the group path was determined using all the channels for telephonic conversations: the effects of

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Investigation of the Mean Power of a Multi-Channel Signal in
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the method of exploiting the channels and of the presence
of channels used for tone-telegraphy, were investigated.
To enable the various factors to be compared a series of
trials was made varying one factor only at a time, the
remaining factors (level of ringing currents, carrier
frequencies, noise etc) being held constant as far as
possible. Maximum, mean and minimum readings of the indi-
cator were noted every 10 seconds. The characteristic
time-change of the minimum and maximum values of the level
of the mean power at the output of a group amplifier is
shown in Fig 2. The curves of the distribution of the
levels of the mean total power for the receiver group
amplifiers are shown in Fig 3. The curves for the trans-
mitter amplifiers are similar. The method of working of
the channels does not have any substantial effect on the
mean power. There are 3 figures and 6 references (4 of
which are Soviet.
SUBMITTED: April 22, 1958

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AUTHOR: Bayeva, N.N.

TITLE: Addition of noise generated by the main line symmetrical cable transients for a small number of influencing sectors and a small number of systems

TEXT: A method of determining the power of transient noises (ПШ (PSh)) in multi-channel table communication lines is considered. Determination of noise amplitude probability distribution is, in this case, made difficult because of the fact that all transient noise harmonics have different amplitudes. The approximate method of evaluation is as follows: The whole aggregate of transient voltages is split into groups in such a manner that in every group the amplitudes of harmonics do not differ by more than 7%. Next for a

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Addition of noise...

given probability the value of voltages U_{res} is determined, this value exceeding by not more than a fraction, the voltage equal to the sum of amplitude added in the group. The averaged value of U_{res} permits determination of the power of noise of transients $W_{tr} = W_{po}$ exp (-2 In U_{res}), where W_{po} is the power in one telephony channel at the point of zero reference level. Results are given of measuring noise of linear transients of the main line, consisting of 28 amplifying sectors with 9 systems operating in parallel K = 24. 1 reference. $\underline{/}$ Abstracter's note: Complete translation $\underline{/}$

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BAYEVA, N. V.

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Mathematical Review.
June 1954
Algebra

10-7-54

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Baeva, N. V. Completely factorizable groups. Doklady Akad. Nauk SSSR (N.S.) 92, 877–880 (1953). (Russian)

A group is said to be completely factorizable if each subgroup A of G has a complement D in G; i.e., there exists a subgroup D such that $AD = G$ and $A \cap D = 1$. P. Hall [J. London Math. Soc. 12, 201–204 (1937)] showed that finite completely factorizable groups are those which are subgroups of direct products of a finite number of groups of square-free order. Without proofs, the author states that, even in the infinite case, generalizing a result of Hall, (1) the commutator subgroup of a completely complemented group is abelian; (2) G is locally abelian; (3) if G is a p-group it is elementary abelian; (4) G is, equivalently, the semi-direct product of a normal abelian subgroup A and of an abelian subgroup D, where both A and D split into direct products of cyclic groups of prime orders which, in the case of A, are normal subgroups of G. Further typical results are: (5) a locally normal group is completely factorizable if and only if it is a subgroup of a (possibly infinite) direct product of the type given by Hall, above. (6) Each group G possessing an ascending normal series with cyclic factors with non-repeating prime orders is completely factorizable. [See the following review.] $F.$ $Haimo.$

BAYEVA, O.A.

35590 BAYEVA, O.A. Obesbolivaniye rodov vitaminom (V.) Trudy sev.-oset, Gos. med. In-ta, Vyp. 4, 1949, C. 101-106

SO: Letopis' Zhurnal'nykh Statey, Vol. 45, 1949

MAMAYEV, Yu.L.; PARUKHIN, A.M.; BAYEVA, O.M.; OSHMARIN, P.G.; KAGANOVSKIY,
A.G., prof., doktor biolog.nauk, red.; BROMLEY, G.F., kand.biolog.
nauk, red.; BUTOVA, L., tekhn.red.

[Helminth fauna of Far Eastern salmonids in connection with the
problem of local stocks and migration routes of these fishes]
Gel'mintofauna dal'nevostochnykh lososevykh v sviazi s voprosom
o lokal'nykh stadakh i putiakh migratsii etikh ryb. Vladivostok,
Primorskoe knizhnoe izd-vo, 1959. 72 p.   (MIRA 13:10)
        (Soviet Far East--Worms, Intestinal and parasitic)
                (Parasites--Salmon)

BAYEVA, O.M.; SOBOLEV, G.I.

Unit for simultaneous determination of the viscosity and
electroconductivity of slags at high temperatures. Zav.
lab. 31 no.1:125-126 '65.   (MIRA 18:3)

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