

15(9)

SOV/69-21-1-13/21

AUTHOR: Novikova, Ye. N.

TITLE: The Swelling of Vulcanized Rubber in an Acetylhydroperoxide Solution. (Nabukhaniye vulkanizirovannogo kauchuka v rastvore gidroperekisi atsetila)

PERIODICAL: Kolloidnyy zhurnal, 1959, Vol XXI, Nr 1 pp 91-96  
(USSR)

ABSTRACT: Research has been made on the effect of inhibitors and initiators on the process of swelling of rubber in benzene and xylene solutions of the acetylhydroperoxide. The iron palmitate was shown to have an initiating effect, and phenols, ammines and oxyammines - an inhibiting action. There are 8 graphs, 1 table and 11 references, 10 of which are Soviet and 1 German.

ASSOCIATION: Minskij Gosudarstvennyy meditsinskiy institut (The Minsk State Medical Institute)

SUBMITTED: May 20, 1957

Card 1/1

S/081/61/000/023/059/061  
B106/B101

AUTHOR: Novikova, Ye. N.

TITLE: Sorption of oxidation inhibitors by carbon blacks and rubber

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 23, 1961, 561, abstract  
23P355. (Sb. nauchn. rabot. Inst. obshch. i neorgan. khimii  
AN BSSR, no. 1, 1960, 154 - 162)

TEXT: The sorption from vaseline oil of amino derivatives of diphenyl (I) and derivatives of naphthalene (II) by carefully purified powdered silica gel (PS) and Lk(-30 (SKS-30) and the sorption from water of phenol derivatives (III), II, and several amino acids (IV) by specially treated channel black (CB) were studied by an interferometric method. The specific surface of CB was  $87.1 \text{ m}^2/\text{g}$ , that of PS  $88.3 \text{ m}^2/\text{g}$ . Lk (SK) [Abstracter's note: Probably, the above-mentioned SKS-30 rubber] was first crushed, sieved, washed with water, and extracted with acetone. The discrepancy between the sorptive activity of III for CB and their inhibiting effect on oxidations may be explained by different hydration of III. The sorptive activity of II decreases in the order  $\alpha$ -naphthol ✓

Card 1/2

KAZAK, T.S.; YEMOLENKO, N.F.; NOVIKOVA, Ye.N.

Kinetics of the oxidation of natural rubber in the presence of inhibitors according to data on variation in the viscosity of solutions.  
Vestsi AN BSSR. Ser.fiz.-tekh.nau. no.2:130-133 '60. (MIRA 13:10)  
(Rubber) (Oxidation)

KOVIKOVA, Ye.N.; PLYUSHCHEVSKIY, N.I.; RAKOVICH, N.I.

Reaction of antioxidants and the hydrogen peroxide of  $\alpha$ -pinene.  
Dokl.AN BSSR 4 no.12:514-517 D.16. (MIA 14:2)

1. Institut obshchey i neorganicheskoy khimii AN BSSR. Predstavлено  
академиком AN BSSR N.F.Ternolenko.  
(Pinene) (Antioxidants)

NOVIKOVA, Ye.N. [Novikava, IA.M.]; PLYUSHEVSKIY, N.I. [Pliusheuski, M.I.]

Effect of inhibitors on the thermal decomposition of isopropylbenzene hydroperoxide. Vestsi AN BSSR. Ser. fiz.-tekhn. nav.  
(MIRA 18:3)  
no. 3: 58-63 '62.

NOVIKOVA, Ye.N.; PETUNINA, M.P.

Alkylphenols and alkylarylphenols as inhibitors of  $\alpha$ -pinene  
autoxidation. Dokl. AN BSSR 6 no.1:39-41 Ja '62. (MIRA 15:2)

1. Institut obshchey i neorganicheskoy khimii AN BSSR.  
Predstavleno akademikom AN BSSR N.F.Yermolenko.  
(Pinene)(Phenols)(Oxidation)

L 16590-65 EWT(m)/EWA(d)/T/EWP(t)/EWP(b) ASD(n)-3 MJW/JD/MLK  
ACCESSION NR: AT4048062 8/0000/64/000/000/0132/0138

3+1

AUTHOR: Novikova, Ye. N.

TITLE: Nitriding of Ti alloys at low pressures

SOURCE: Soveshchaniye po metallurgii, metallovedeniyu i primeneniyu titana i yego  
spakov. 5th, Moscow, 1963. Metallovedeniye titana (Metallography of titanium);  
trudy\* soveshchaniya. Moscow, Izd-vo Nauka, 1964, 132-138

TOPIC TAGS: titanium alloy, nitriding, titanium alloy mechanical property, titanium  
alloy wear resistance, aluminum containing alloy, molybdenum containing alloy/alloy VT

ABSTRACT: Previous publications have noted that the diffusion layer on Ti in pure  
nitrogen at normal pressure is formed at temperatures above 800C. The diffusion layer  
consists of two zones: the upper one is a thin nitride layer and the lower one is a thicker  
one. This paper considers the effect of low

was performed mostly at 950C and partially at 870 and at pressures of 760, 100, 10<sup>-1</sup>, 10<sup>-2</sup>

Card 1/3

L 16590-65

ACCESSION NR: AT4048062

and 3 x 10<sup>-2</sup> mm Hg. Nitrogen flow was about 0.3 liters per minute. At 10<sup>-1</sup> mm Hg a lower nitrogen flow of 0.09 and 0.03 liter per minute was used. The duration was generally 8 hours. The 20-hour process was at 950C and optimal pressure. The tests showed that lowering of pressure in the chamber from 760 to 1-0.1 mm Hg during nitriding of Ti alloys leads to a 50-100% increase in the nitrided layer, while the depth of the brittle nitride zone is decreased several times. For each Ti alloy at a certain temperature and duration, there is now occurring maximum depth of the layer. The

sample after nitriding in a vacuum diffuser only slightly above normal pressure. Orig. art. has 2 figures and 3 tables.

ASSOCIATION: none

SUBMITTED: 15Jul64

ENCL: 01

SUB CODE: MM

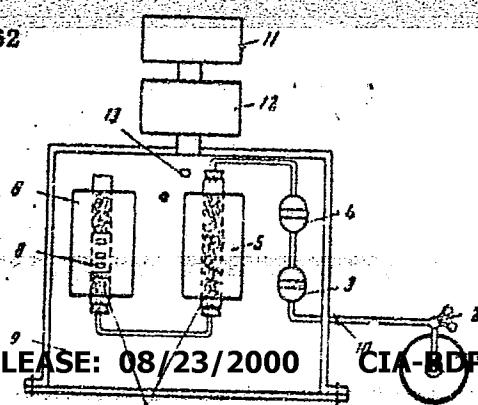
NO REF SCV: 004

OTHER: 003

Card 2/3

L 16590-65  
ACCESSION NR: AT4048062

ENCLOSURE: 01



APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001237510018-3

Fig. 1. Scheme of the nitriding process under low pressures: 1-nitrogen bottle; 2-gas pressure reducer; 3-silica gel vessel; 4-vessel with  $P_2O_5$ ; 5-vessel for getter; 6-nitriding furnace; 7-titanium shavings; 8-samples; 9-cylindrical vacuum furnace; 10-gas valve; 11-primary vacuum pump; 12-diffusion pump; 13-place for measuring pressure.

Card 3/3

NOVIKOVA, Ye.N. [Novikava, IA.M.]

Decomposition of tertiary butyl hydroperoxide in the presence  
of inhibitors. Vestsi AN BSSR. Ser. fiz.-tekhn. nav. no.4:53-66  
'64. (MIRA 18:3)

L 3006-66 EWT(d)/EWT(m)/EWP(w)/EFF(c)/EWA(d)/T/EWP(t)/EWP'(z)/EWP(b) IJP(c)

ACC NR: AP5025592 MJW/JD/WB/DJ

UR/0129/65/000/010/0019/0022

51

621.785.53: 295

50

B

AUTHOR: Novikova, Ye. N.; Gurevich, S. I.; Nikitina, L. M.

TITLE: Suitability of nitrided VT14 alloy as a gear material

SOURCE: Metallovedeniye i termicheskaya obrabotka metallov, no. 10, 1965, 19-22, and top half of insert facing p. 24

TOPIC TAGS: titanium alloy, nitriding, metal friction, wear resistance, transmission gear

ABSTRACT: The VT14 titanium alloy (4.3% Al, 3.22% Mo, and 6% V) in thermally hardened state (water quenching from 860°C and aging at 500°C for 16 hr) displays an ultimate strength of 115 kg/mm<sup>2</sup> and a plasticity of 20%. Like all the other titanium alloys, however, the VT14 displays low antifriction properties, and hence it must be surface-hardened (i.e., in this case, nitrided) before it can be used as the material of friction couplings. The nitriding is performed in a flow of purified N<sub>2</sub> at 850-950°C. Experiments with rollers and gears produced from hot-rolled rods of nitrided VT14 alloy (the hot deformation began at 1050°C -- monophase region -- and ended at 950°C, which corresponded to the α + β region) showed that their wear resistance and precision of meshing were satisfactory. The depth of diffusion coating on the gear tooth was 0.08-0.10 mm. Thus, alloy VT14 in nitrided form may be recommended as

1/2  
Card

L 3006-66

ACC NR: AP5025592

a gear material. Its use will make it possible to reduce nearly in half the weight of reducing gears and to dispense with labor-consuming anticorrosion measures.  
Orig. art. has: 1 figure, 2 tables.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: MM, IE

NO REF Sov: 001

OTHER: 000

Card 212 Md

Novikova, Ye. P.

NOVIKOVA, Ye.P.

Control of endemic goiter. Vrach.delo no.10:1097-1099 O '57.  
(MIR 10:12)

1. Sanitarno-epidemiologicheskaya stantsiya Krasnoarmeyskogo  
rayona g. Lvova.  
(LVOV PROVINCE--GOITER)

POPOV, V.V., kand.med.nauk, NOVIKOVA, Ye.P.

Fluorine and thiocyanide content of drinking water and food products  
in an area of endemic goiter. Vrach.delo no.8:871 Ag '58 (MIRA 11:8)

1. Kafedra gigiyeny pitaniya i komunal'noy gigiyeny (zav. - prof.  
A. I. Stolnayeva) L'vovskogo meditsinskogo instituta.  
(GOITER)  
(FLUORINE)

NOVIKOVA, Ye.P., assistant

Trace elements in the potable water of Lvov Province and  
endemic goiter. Gig. i san. 26 no.9:80-82 S '61. (MIRA 15:3)

1. Iz kafedry gigiyeny pitaniya i kommunal'noy gigiyeny  
L'vovskogo meditsinskogo instituta.

(LVOV PROVINCE—WATER—ANALYSIS)  
(TRACE ELEMENTS) (GOITER)

NOVIKOVA, Ye.P. (L'vov)

Effect of cobalt, iodine, and 6-methylthioracil on changes in  
the thyroid gland in white rats. Vrach. delo no.4:140-142  
(MIRA 16:7)  
Ap'63.

1. Kafedra gigiyeny pitanija i komunal'noy gigiyeny (zav.-prof.  
A.I.Stol'makova) i kafedra gistolologii i embriologii (zav.-prof.  
A.P.Dyban) meditsinskogo instituta.  
(THYROID GLAND) (COBALT--PHYSIOLOGICAL EFFECT)  
(IODINE--PHYSIOLOGICAL EFFECT) (URACIL)

NOVIKOVA, Ye.P. (L'vov)

Effect of cobalt on the morphological structure of the thyroid gland in white rats with a different iodine content in their diet. Probl. endok. i gorm. 9 no.3:31-34 My-Je '63.  
(MIRA 17:1)

1. Iz kafedry gigiyeny pitaniya i kommunal'noy gigiyeny (zav. - prof. A.I. Stolmakova) i kafedry histologii i embriologii (zav. - prof. A.P. Dyban) L'vovskogo meditsinskogo instituta.

MOVIKOVA, Ye. P.

Effect of cobalt on the iodine content of the thyroid gland  
in rats depending on its various levels in the diet. Vop.  
pit. 22 no.2:45-48 Mr-Ap '63. (MIRA 17:2)

1. Iz kafedry gigiyeny pitaniya i kommunal'noy gigiyeny  
(sav. - prof. A.I. Stolmakova) L'vovskogo meditsinskogo  
instituta.

NOVIKOVA, Ye.P.

Effect of food rations with a different iodine and cobalt content  
on the iodine level in the thyroid gland following the introduction  
of 6-methylthiouracil. Vrach. delo no.3:110-114 Mr '64.  
(MIRA 17:4)

1. Kafedra gigiyeny pitaniv i kommunal'noy gigiyeny (zav. - prof.  
A.I.Stolmakova) i kafedra gistolozii (zav. - prof. A.P.Dyban)  
L'vovskogo meditsinskogo instituta.

ZHEREBTSOV, Ivan Petrovich; NOVIKOVA, Ye.S., red.; SHEFER, G.I.,  
tekhn. red.

[Radio engineering] Radiotekhnika. Izd.5., perer. i dop.  
Moskva, Izd-vo "Sviaz", 1964. 662 p. (MIRA 17:3)

BORUNOVA, H.V.; FREYDIH, L.Kh.; Khol'mer, O.M.; NOVIKOVA, Ye.S.

Preparation of propionaldehyde by catalytic dehydrogenation  
of n-propyl alcohol. Izv. AN SSSR. Ser. khim. no.10:1845-1849  
'65. (MIRA 18:10)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR i  
Moskovskiy zavod "Slozhnyye efiry".

NOVIKOVA, Ye.S.

NOVIKOVA, Ye. S.: "The synthesis and investigation of certain derivatives of metaiodobenzoic acid." Min Higher Education. Tomsk Order of Labor Red Banner Polytechnic Inst imeni S. M. Kirov. Tomsk, 1956. (Dissertation for the Degree of Candidate in Chemical Sciences).

SO: Knizhaya Letopis', No 23, 1956

Novikova, E. S.

✓ Synthesis of some halogen derivatives of benzochromanone  
B. V. Tronov and E. S. Novikova (Ural'sk. Inst. Tsvetn. Metallur. Obshch. Kemiya), 1977, 3(1978). Treatment of  
 $1C_6H_5COCl$  with  $PCl_5$  gave  $m-IC_6H_4COCl$ , b.p. 150 °C.,  
which by conventional Friedel-Crafts method, with  $AlCl_3$ ,

NOVIKOVA, Ye.S.

NOVIKOVA, Ye.S.: YEGORSHINA, L.A.

~~Synthesis of thiosemicarbazones and  $\alpha$ -iodobenzhydrazones of some halide derivatives of benzophenone. Zhur. ob. khim. 27 no. 5: 1249-1252 My '57.~~  
(MLRA 10:8)

1. Tomskiy politekhnicheskiy institut i Tomskiy nauchno-issledovatel'skiy institut vektsin i syverotok.  
(Semicarbazones) (Benzophenone) (Hydrazones)

5 (3)

AUTHOR:

Novikova, Ye. S.

SOV/153-2-2-11/31

TITLE:

Condensation of Iodobenzoic Acid Chlorides With Aromatic Hydrocarbons and Their Halogen Derivatives (Kondensatsiya khlorangidridov iodbenzoynykh kislot s aromaticeskimi uglevodorodami i ikh galogenoproizvodnymi)

PERIODICAL:

Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i khimicheskaya tekhnologiya, 1959, Vol 2, Nr 2, pp 204 - 206 (USSR)

ABSTRACT:

One of the most topical problems of theoretical organic chemistry is the explanation of the rules in the reciprocal effect of atoms in organic compounds, furthermore the explanation of the effect of molecular composition and structure on the direction and rate of reactions and on the physiological activity. The great number of compounds not yet investigated, include the compounds mentioned in the title, the hydrazones and thiosemicarbazones of the halogen derivatives of benzophenone. It was intended to investigate in this article the subject mentioned in the title, with the o-, m- (Refs 1,2) and p-iodine benzoic acids, etc. Furthermore the rules noticed in the reciprocal influence of the atoms in their rate of condensation reaction, should be compared to the physiological activity of these hy-

Card 1/4

Condensation of Iodobenzoic Acid Chlorides With      90V/153-2-2-11/31  
Aromatic Hydrocarbons and Their Halogen Derivatives

drazones, and thiosemicarbazones (Ref 3). The course of the condensation reaction of the three mentioned iodine benzoic acids was studied with benzene, toluene, naphthalene, fluorobenzene, chlorobenzene, bromobenzene, as well as iodobenzene, furthermore with dichlorobenzene, dibromobenzene and diiodobenzene in the presence of anhydrous aluminum chloride. The results are shown in a diagram (Fig 1). It proved that the rate of the condensation reaction in the cases of the mono- and dihalogen derivatives is always higher with o-iodine benzoyl chloride than with other acid chlorides compared. As far as the decreasing activity is concerned, one could also see that the substances chosen for the condensation, in their relation to the acid chlorides of all three iodobenzene acids, place themselves in the following order: naphthalene > toluene > benzene > fluorobenzene > iodobenzene > bromobenzene > chlorobenzene > diiodobenzene > dibromobenzene. Some of the derivatives of the m-iodobenzoic acids, namely: the thiosemicarbazones of m-iodobenzophenone, m-ido-, p'-fluorobenzophenone, m-ido-p'-chlorobenzophenone, as well as the hydrazones of m-ido-benzohydrazide, of m-ido-p'-fluorobenzophenone, of p-ido-

Card 2/4

Condensation of Iodobenzoic Acid Chlorides With  
Aromatic Hydrocarbons and Their Halogen Derivatives

SOV/153-2-2-11/31

benzophenone were microbiologically examined by means of the method of the surface film (metod poverkhnostnoy plenki) on a liquid potato medium with a breed of tuberculosis bacteria of the type "Akademiya". A comparison was made between the results of the course of the condensation reaction of m-iodobenzoic acid chloride with benzene, fluorobenzene and chlorobenzene (Fig 1-V) on the one hand, and the data of the bacteriostatic examination of thiosemicarbazones on the other hand. An interdependence was noticed between the composition, as well as the structure of the radicals of the thiosemicarbazone molecules and hydrazone molecules, and the antibacterial activity of the latter on the one hand; and the reactivity of the corresponding acid chlorides, as well as the aromatic halogen derivatives in the ketone synthesis on the other hand. Decreasing reactivity: benzene > fluorobenzene > chlorobenzene; the series of the decreasing bacteriostatic activity: m-iodobenzophenone-thiosemicarbazone > m-iodo-p'-fluorobenzophenone-thiosemicarbazone > m-iodo-p'-chlorobenzophenone-thiosemicarbazone. The mentioned rule is not clearly expressed. As far as the position of the iodine atom in the radicals is con-

Card 3/4

Condensation of Iodobenzoic Acid Chlorides With      SOV/153-2-2-11/31  
Aromatic Hydrocarbons and Their Halogen Derivatives

cerned, the metaderivatives have a greater bacteriostatic activity than the paraderivatives. m-iodobenzoylchloride is less active than p-iodobenzoyl chloride (Fig. 2). There are 2 figures and 7 references, 3 of which are Soviet.

ASSOCIATION: Tomskiy politekhnicheskiy institut, Kafedra organicheskoy khimii  
(Tomsk Polytechnical Institute; Chair of Organic Chemistry)

SUBMITTED: January 13, 1958

Card 4/4

ONUFRIYENOK, I.P.; AKSEHENKO, V.M.; NOVIKOVA, Ye.S.

Coprecipitation of selenium and tellurium with the aid of collectors.  
Izv.TPI 111:115-118 '61. (MIRA 16:9)

1. Predstavleno nauchnym seminarom kafedry analiticheskoy khimii  
Tomskogo ordena Trudovogo Krasnogo Znameni politekhnicheskogo  
instituta imeni Kirova.  
(Selenium) (Tellurium) (Precipitation (Chemistry))

PAPERNOV, Lev Zakharovich; GORON, I.Ye., otv. red.; NOVIKOVA,  
Ye.S., red.

[Level indicators] Indikatory urovnja. Moskva, Sviaz',  
1964. 41 p.

NOVIKOVA, Ye. V.

Cytodiagnosis of cancer of the corpus and cervix uteri and of neoplasms of the ovaries. Akush. ginek. no.2:40-42 Mar-Apr 1953.  
(CLML 24:3)

1. Docent. 2. Of the Department of Obstetrics and Gynecology (Head  
--- Prof. I. I. Yakovlev), Sverdlovsk Medical Institute and of  
Sverdlovsk Scientific-Research Institute for the Care of Mother and  
Child.

BERSHTEYN, V.A., inzh.; Prinimali uchastiye: KRASIL'SHOKHOVA, B.L.,  
inzh.; NOVIKOVA, Ye.V., inzh.; LAVRIN, A.V., inzh.; GEFKOV, D.I.,  
inzh.; KITAYCHIK, V.A., inzh.; GLIKMAN, L.A., prof., doktor tekhn.  
nauk; SUPRUN, L.A., kand.tekhn.nauk, nauchnyy red.; STRUMEE, P.I.,  
kand.tekhn.nauk, otv.red.

[Stress-rupture strength and creep of glass-reinforced plastics  
for use as shipbuilding material.] Dlitel'naia prochnost' i  
polzuchest' stekloplastikov kak sudostroitel'nykh materialov.  
Leningrad, Izd-vo "Morskoi transport," 1963, 92 p. (Leningrad.  
TSentral'nyi nauchno-issledovatel'skii institut morskogo flota.  
Trudy, no. 53) (MERA 17:6)

1. Sotrudniki TSentral'nogo nauchno-issledovatel'skogo  
kotloturbinnogo instituta imeni Polzunova (for Grekov, Kitaychik).

NOVIKOVA, Ye. V.

Transpiration of hydrophytes and their role in the general loss  
of water through evaporation from Kengir Reservoir. Trudy Inst.  
bot. AN Kazakh. SSR 16:118-135 \*63 (MIRA 176)

BEZBORODOV, M.A., akademik; YERMOLENKO, N.N., kand.tekhn.nauk;  
ZHUNINA, L.A., kand.tekhn.nauk; NOVIKOV, Ye.Z., inzh.

Light refraction and crystallizing capacity of glasses distributed  
in some sections of the system  $\text{Na}_2\text{O} - \text{CaO} - \text{BaO} - \text{ZrO}_2 - \text{SiO}_2$ .  
Sbor. nauch. trud. Bel. politekh. inst. no.82:29-33 '60.  
(MIRA 15:5)

(Glass research) (Systems (Chemistry))

ZHUNINA, L.A., kand.tekhn.nauk; KRIPSKIY, A.M., inzh.; NOVIKOVA, Ye.Z.

Preparation of crystalline glass material from easily melting  
White Russian clays. Sbor. nauch. trud. Bel. politekh. inst.  
no.82:79-85 '60. (MIRA 15:5)  
(Glass manufacture) (White Russia—Clay)

KESSENIKH, V. N.; KAZIMIROVSKIY, YE. S.; NOVIKOVA, Yu. A.

"Atmosphere Dependence as Revealed by Some Mid-Latitude and Middle-Asian  
Station of USSR."

Summary to be presented at 13th Gen Assembly, IUGG, Berkeley, Calif, 19-31 Aug 63.

NOVIKOVA, Yu.M.

Production of the Yong Technician Station film studio. IUn.tekh.  
no.1:70-74 S '56. (MIRA 10:3)  
(Motion pictures in education)

NOVIKOVA, Yu.N., inzh. (Murmansk)

Contact-spark method for obtaining samples. Energetik 13  
no.11:29-30 N '65. (MIRA 18:11)

NOVIKOVA, Yu.N.

Analysis of ATSK-12 alloy by means of the FES-1 spectro-  
photometer. Zav. lab. 31 no. 12:1466 '65 (MIRA 19:1)

NOVIKOVA, Z. I.

Mbr., Leningrad Physico-Tech. Inst., Acad. Sci., -1941-1949-. Mbr., Leningrad  
Polytech. Inst., im. M. I. Kalinin, -1949-. "Studies of Polymers: I. Dielec-  
tric Losses in Polar Polymers," Zhur. Tekh. Fiz., 14, Nos. 1-2, 1948;  
"Dependence of the Dielectric Constant of Co-Polymers on Temperature," ibid.,  
19, No. 1, 1949; "Determining the Dipole Moment for Co-Polymers," ibid.  
19, No. 1, 1949;

NOVIKOVA, Z. I.  
USSR/Chemistry - Polymers  
Chemistry - Dielectric Constants

Jan 49

"Dependence of the Dielectric Constant of Co-Polymers on Temperature," P. P. Kobeko,  
G. P. Mikhaylova, Z. I. Novikova, Leningrad Physicochém Inst, Acad Sci US<sup>n</sup> and  
Leningrad Polytech Inst imeni M. I. Kalinin, 4 pp

"Zhur Tekh Fiz" Vol XIX, No 1

Co-polymers were obtained in form of films and pressed strips, dielectric losses and capacity were measured both on a Vin bridge and a Q-meter in range from  $10^3$  to  $10^8$  cycle/sec, and temperature coefficient of capacity was measured by pulsation method at a frequency of  $6 \cdot 10^3$  cycle/sec. Thus, influence was clarified of polar and nonpolar sections of macromolecule on variation af polymer's dielectric permeability at various temperatures.

PA 24/49T7

NOVIKOVA, Z. I.

SA

A53

2

537.226.2 : 541.64

298. The temperature-dependence of the dielectric constant of copolymers.  
P. F. Kobeko, G. P. Mikhailov and ~~Z. I. Novikova~~. J. Tech. Phys., USSR, 19,  
116-19 (Jan., 1950) in Russian.

The production of copolymers permits the study of the influence of the polar and the non-polar parts of the macromolecule on the change of the dielectric permeability of the polymer at various temperatures. Together with the choice of appropriate concentration, one can obtain in a large temperature interval complete internal mutual compensation of the temperature-dependence of the capacity caused by the dipole and electronic polarization. This shows that the electrical and depole polarization in macro-molecules in an external field are, to a considerable extent, independent of each other. In this respect, they are externally similar to mechanical mixtures, though they differ physically from them in that they represent systems in which separate dipoles and non-polar components are chemically combined into uniform macro-molecules.

Brookhaven Guide to Russian Literature

NOVIKOVA, Z. I.; RABKIN, L. I.,

"Design of Coils with Shell-type and Toroidal Cores," New Works in the Field of Wire Communication; Collection of Information) Moscow, Svyaz'izdat [1957] 85 p.

Abst.: This article explains the calculation of optimal dimensions of coils with toroidal cores designed for operation in the audio-frequency range, and offers a method for calculating minimum volume (for a given Q-factor and inductance) of a coil with shell-type and toroidal cores. As the basis for their calculations the authors assumed a constant ratio of the inner and outer coil diameters. The article discusses the following specific phases of the problem: the principle of calculating induction coil Q-factor; calculation by the H. A. Stone method of optimal ratio of dimensions of shell-type cores for audio-frequencies; calculation of the optimal ratio of dimensions of toroidal cores for audio frequencies; method of calculating the Q-factor of a coil, taking into account winding hysteresis eddy-current and initial losses. Examples of these calculations are given.

*NOVIKOVA, Z.I.*

AUTHOR: RABKIN,L.I., NOVIKOVA,Z.I. 109-6-9/17  
TITLE: Calculation of Ring Coils with Ferrite Core Operating in the  
Range of Sonic Frequencies (Raschet kol'tsevykh katushek s  
ferritovym serdechnikom, rabotayushchikh v oblasti zvukovykh  
chastot, Russian)  
PERIODICAL: Radiotekhnika i Elektronika, 1957, Vol 2, Nr 6, pp 762-762  
(U.S.S.R.)  
ABSTRACT: Calculation of the optimum measurements of a ring core of oval  
cross section is carried out by taking the constant ratio between  
the outer and inner diameter of the coil into account. The opti-  
mum inverse amplification factor warranting a minimum volume of  
the coil in the case of a given quality is calculated. First cal-  
culation of the quality of the coil with core is carried out, and  
it is shown that the derived formula cannot be solved in a general  
form. Therefore further simplification is necessary and calcula-  
tion must be carried out for two special cases:  
1.) For the case in which Ohm's resistance and the resistance  
of initial and frequency losses predominate,  
2.) For the case in which Ohm's resistance and the resistance of  
the hysteresis losses predominate. (With 1 Table, 3 Illu-  
strations and 3 Slavic References).

Card 1/2

109-6-9/17

Calculation of Ring Coils with Ferrite Core Operating in the  
Range of Sonic Frequencies.

ASSOCIATION: Not given

PRESENTED BY:

SUBMITTED:

AVAILABLE: Library of Congress

Card 2/2

24(3)

AUTHORS:

Rabkin, L. I., Novikova, Z. I.

SOV/48-23-3-20/34

TITLE:

Electric Properties of Magnetodielectrics and Ferrites  
(Elektricheskiye svoystva magnetodielektrikov i ferritov)

PERIODICAL:

Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1959,  
Vol 23, Nr 3, pp 388-396 (USSR)

ABSTRACT:

The present paper deals with the investigation of the dielectric properties of a number of nickel-zinc-ferrites with different initial permeability. Table 1 gives the names of the investigated ferrites, their compositions and the conditions of sintering. In all investigated ferrites the existence of a range of relaxation, the phase angle tangent line and the dielectric constant were determined. Figure 1 gives the dependence of the  $\operatorname{tg}\delta'$  in the frequency range of  $2 \cdot 10^2$  to  $2 \cdot 10^7$  cycles on the frequency of the investigated ferrite samples MTs-I, II, III and IV (Table 1) at room temperature. Only in the case of the sample with an initial permeability of 1,500 gauss  $\text{oe}^{-1}$  a maximum is observed at room temperature in the frequency dependence of the dielectric phase angle tangent line, which shifts into the range of higher frequencies and increases as soon as temperature rises (Fig 2). The maximum

Card 1/4

**Electric Properties of Magnetodielectrics and  
Ferrites**

SOV/48-23-3-20/34

of the phase angle tangent line was also observed in other ferrite samples at higher temperatures (Figs 3, 4 and 5). The dielectric constant of the investigated polycrystalline ferrites increases considerably with temperature in the range where  $\operatorname{tg} \delta$  has a maximum (Fig 6). In the case of high frequencies the dielectric constant depends but little on temperature (Figs 7 and 8). At low temperatures, however, it changes with the frequency in the investigated temperature— and frequency range. In figure 9 frequency dependences of the phase angle tangent line and of the dielectric constant of nickel-zinc- and manganese ferrites are compared with practically equal values of magnetic permeability ( $\mu \approx 2,000$ ). Table 2 gives the parameters of dielectric- and magnetic characteristics of a slowly and rapidly cooled ferrite sample NTs-III on a frequency of 60 kilocycles. Modern magnetically soft magnetodielectrics may be divided into two groups: ferroplastic substances - mechanically strong magnetodielectrics with weak coercive force, and ferroelastic substances - elastic magnetodielectrics, also with weak coercive force (Ref 1). The authors investigated magnetodielectrics of

Card 2/4

Electric Properties of Magnetodielectrics and  
Ferrites

SOV/48-23-3-20/34

natural rubber and Alsifer powders and nickel-zinc-ferrites with magnetic permeability of 250 gauss  $\text{oe}^{-1}$  and 1,000 gauss  $\text{oe}^{-1}$ . The results of measurement are shown in figures 10 and 11. It may be seen that the dielectric constant increases with increasing amount of ferromagnetic and decreases with constant concentration of the latter in the case of increasing frequency (Fig 10). The phase angle tangent line increases also with increasing amount of ferromagnetic. The frequency dependence of the ferroelastic substances on ferrite basis on  $\text{tg } \delta$  is due to the  $\text{tg } \delta$  of ferrites themselves which are dependent on frequency. The frequency dependence of the ferroelastic substances with 90 % ferrite NTs-III on  $\text{tg } \delta$  has, in the case of higher temperature, a  $\text{tg } \delta$  maximum (Fig 12) on the same frequency as NTs-III in figure 6. The electric field in the core does not only depend on its electric parameters but also on the form of the core and the kind of the coiling. Figure 13 gives the scheme of a toroid coil according to calculations made by Kornetskiy and Veis (Ref 2). The effect of the thickness of the insulating layer between core and coiling upon the quality of the coil is shown in figure 14 and the

Card 3/4

24(3)  
AUTHOR:

Novikova, Z. I.

SOV/48-23-3-21/34

TITLE:

Investigation of Dielectric Properties of Ferrites (Issledova-  
niye dielektricheskikh svoystv ferritov)

PERIODICAL:

Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1959;  
Vol 23, Nr 3, pp 396-402 (USSR)

ABSTRACT:

Dielectric properties of nickel-zinc-ferrites and solid  
solutions of the nickel-zinc-ferrites of stoichiometric and  
non-stoichiometric composition were investigated as functions  
of the annealing temperature and with respect to the rate of  
cooling and the surrounding medium. The frequency dependences  
of the dielectric constant and the dielectric phase angles  
were investigated in the frequency range of 200 cycles  $\pm$  10 mega-  
cycles at room temperature. Figures 1 and 2 show the frequency  
dependence of the tangent line of the phase angle for zinc-  
and nickel-ferrites which were annealed at 1,200, 1,250 and  
1,300°, and slowly cooled until room temperature was attained.  
Both ferrites differ considerably by the position of the ions  
in the crystal lattice and their magnetic properties. Figures  
3 and 4 show the frequency dependences for equal ferrites at  
different temperatures of annealing. Both ferrites have the

Card 1/4

## Investigation of Dielectric Properties of Ferrites

SOV/48-23-3-21/34

by the amount of specific resistance (Fig 12). The frequency dependence of the phase angle tangent line according to measurements made by Koops (Ref 1) is shown in figure 13. Summarizingly, it may be said that the relaxation frequency of the dielectric phase angle tangent line in ferrites does not depend on the specific resistance, measured in direct current. Maxima of the phase angle tangent line occur in three certain ranges of frequency: 20-40 kilocycles, 100-200 kilocycles, and 1-2 megacycles. The relaxation movement of any particles rather than the heterogeneity of the material is the reason for these losses. The relaxation maximum of the phase angle tangent line in the frequency range of 100-200 kilocycles is in connection with the existence of  $\text{Fe}^{2+}$ -ions in the sample. The latter cause the conductivity of the ferrites, strictly speaking, of the electrons passing from  $\text{Fe}^{2+}$  to  $\text{Fe}^{3+}$  (Verwey mechanism). A redistribution of the ions in the crystal lattice is due to the variation of the duration of cooling, which leads to the formation of new relaxator types or increases the number of the existing ones. There are 13 figures, 2 tables, and 7 references, 3 of which are Soviet.

Card 3/4

NOVIKOVA, Z.I.

## PAGE 1 BOOK EXPLOITATION

SOV/4893

Vesopunore Soveshchaniye po fizike, fiziko-khimicheskikh avotatov  
Ferritov i prisobchevnykh otnovok ikh prilozheniya. 24. Rinsk, 1959  
Periodychische 1 fiziko-khimicheskije avotaty. Doklady  
Ferrites, Physical and Mathematical Properties, Reports  
Rinsk, Izd-vo Akad. Nauk SSSR, 1960. 655 p. Errata slip inserted.  
Rinsk, Izd-vo Akad. Nauk SSSR, 1960. 655 p. Errata slip inserted.  
4,000 copies printed.

Spontaneous Agency: Nauchnyy sovet po magnetizmu AM 225N. Order:  
FATAK, Tveretskaya tola 1 poluprevodnik AM 225N.

Editorial Board: Prof. I. M. Sirota, Academian of the  
Academy of Sciences, USSR; K. P. Matveev, Professor; V. I. Komarov,  
Professor; K. M. Polivanov, Professor; N. V. Tuzikov, Pro-  
fessor; G. A. Shobal'nikov, Professor; N. N. Shol'tsa, Candidate of  
Physical and Mathematical Sciences; E. M. Zabolotskii, Tech.  
L. A. Shaburov, Head of Publishing House; S. Kholyavitsky, Tech.  
M. I. Volkovskii.

Purpose: This book is intended for physicists, physical chemists,  
radio electronics engineers, and technical personnel engaged in  
the production and use of ferromagnetic materials. It may also  
be used by students in advanced courses in radio electronics,  
physics, and physical chemistry.

Content: The book contains reports presented at the Third All-  
Union Conference on Ferrites held in Rinsk, Balakansian SSR.  
The reports deal with magnetic transformations, electrical and  
geodynamical properties of ferrites, studies of the growth  
of ferrite single crystals, problems in the chemical and physi-  
cal synthesis of ferrites, studies of ferrites having systems  
of loops and multicompONENT ferrite systems  
rectangular hyperboloids, magnetic hysteresis, magnetic  
attraction, highly coercive ferrites, magnetic properties of  
ferromagnetic resonators, magneto-optical physical anisotropy of  
using ferrite components in electronic circuits, electrical  
electrical and magnetic properties, etc. The Committee on Fer-  
rines, USSR (J. V. Ushakov), organized the con-  
ference. References accompany individual articles.

## Ferrites (cont.).

SOV/4893  
Bulakhov, L. I. and I. S. Gusev. Magnetoochemical In-  
vestigation of Nickel-Zinc Ferrites. 137

Bulakhov, L. I. and A. M. Gordina. New Ferrites for the  
100-1000 Frequency Range. 142

Sablin, L. V. and Z. I. Novikova. Some Properties of  
Nickel-Zinc Ferrites Depending upon the Conditions of  
Synthesis and Their Content of Fe<sup>3+</sup> Ions. 146

Zolotarev, E. P. Discussion of the Proceedings Report  
Bulakhov, L. I. and N. N. Sirota. X-Ray  
Structural Investigation of the Ferrimagnetic Spinel  
NiFe<sub>2</sub>O<sub>4</sub>-ZnFe<sub>2</sub>O<sub>4</sub>-MnFe<sub>2</sub>O<sub>4</sub>. 159

Bulakhov, L. I. and N. N. Sirota. Investigation of  
the Effect of Composition on the Properties of Hexagonal  
Manganese Ferrites. 161

Card 6/18

Card 4/18

30080  
S/048/61/025/011/026/031  
B102/B108

15.2640

AUTHORS:

Rabkin, L. I., and Novikova, Z. I.

TITLE:

Comparison of electrical and magnetic properties of nickel-zinc ferrites

PERIODICAL:

Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya,  
v. 25, no. 11, 1961, 1413-1418

TEXT: In earlier publications (e.g., Izv. AN SSSR. Ser. fiz., 23, No. 3, 388 (1959)) the authors had shown that the properties of ferrites are strongly affected by  $Fe^{2+}$  ions. Now they have studied the effect of the  $Fe^{2+}$  concentration in Ni-Zn ferrites upon resistivity,  $\rho$ , dielectric constant,  $\epsilon$ , magnetic permeability,  $\mu$ , activation energy of conduction  $E_a$ , and upon the conduction loss angle,  $\tan \delta_c$ , dielectric loss angle,  $\tan \delta_d$ , and magnetic loss angle  $\tan \delta_m$ . Results are summarized as follows: At low frequencies, electrical conductivity and dielectric constant increase monotonically with rising  $Fe^{2+}$  concentration.  $\mu$  as a function of the  $FeO$

Card 1/A3

30080  
S/048/61/025/011/026/031  
B102/B108

Comparison of electrical conductivity,  $\sigma$ , exhibits a high, narrow peak at  $< 0.5\%$  by weight of FeO. The conduction activation energy increases with rising  $\sigma$  and is inversely proportional to the FeO concentration:  $E_g = A/\log X$ . In addition,  $E_g$  increases exponentially with  $\sigma$ . In most cases, the temperature and frequency characteristics of  $\tan \delta_\mu$  and  $\tan \delta_\epsilon$  exhibit one or two peaks in the range of 1-100 kc/sec, one near the Curie point, and the other at low temperatures. The position of the latter peak is both frequency- and temperature-dependent, and is shifted to higher temperatures as the frequency increases. The maximum value of  $\tan \delta_\epsilon$  increases with rising  $X$ . At a given frequency, the maximum of  $\tan \delta_\mu$  is at lower temperatures than that of  $\tan \delta_\epsilon$  for one and the same sample. The maximum value of  $\tan \delta_\mu$  is by one or two orders of magnitude less than that of  $\tan \delta_\epsilon$ .  $E_g$  is about as high as the activation energy of dielectric relaxation. For both magnetic and dielectric relaxation processes the relation  $\tau = \tau_0 e^{E/kT}$  is valid, where  $E$  = activation energy, and  $\tau$  = relaxation time. This indicates that both magnetic and dielectric processes are

Card 2/K3

NOVIKOVA, Zinaida Leont'yevna, doyarka; KOLOMIYTSEVA, O.I., red.; AVDEYEVA, V.A., tekhn. red.

[New methods in dairying] Novye metody v molochnom khoziaistve. Moskva, Izd-vo "Sovetskaiia Rossiia," 1961. 28 p. (MIRA 14:11)

1. Opytnaya sel'skokhozyaystvennaya stantsiya Vladimirs'koj oblasti  
(for Novikova).

(Dairying)

KOZLOVSKIY, G.I. [Kozlovs'kyi, H.T.]; NOVIKOVA, Z.M. [Novykova, Z.M.];  
GOLUBCHIK, S.A. [Holubchik, S.A.]; SLIVA, Yu.D. [Slyva, Iu.D.]

Processing of nonmalt products with high protein content  
in the brewing industry. Khar.prom. no.1:41-44 Ja-Mr '62.  
(MIRA 15:8)

1. UkrNDIKhP (for Kozlovskiy, Novikova). 2. Khar'kovskiy  
pivovarennyy zavod No.1 (for Golubchik, Sliva).  
(Brewing)

KOZLOVSKIY, G.I. [Koslows'kyi, H.I.]; MOVIKOVA, Z.M. [Movykova, Z.M.];  
AKSINOVA, Z.M. [Aks'onova, Z.M.]

Effect of ferment obtained from mold fungi on some vegetable  
proteins and carbohydrates. Khar. prom. no.1:53-56 Ja-Mr '63.  
(MIRA 16:4)

(Fermentation)

NOVIKOVA, Z. N.

✓ Antioxidants from biological sources for preventing rancidity in fats. E. S. Tatenko, A. B. Sobol, and Z. N. Novikova (Ukr. Research Inst. Food Ind. Sci., Kharkov). *Mikrobiologiya*, 24, 217-22 (1955).—The fungus *Nasmythella oleaginea* can accumulate up to 52% lipoids (calcd. on dry wt.); its optimum conditions are, temp. 25-3°, pH 5-6, 0.2-1%  $\text{KH}_2\text{PO}_4$  in the nutrient medium. *N. humicola* and a *Meristella* species are nearly as active in storing lipoids, which contain 1-18% unsaponifiables of which one component at a concn. of 0.01% increases the rancidity resistance of edible fats 2.5-fold. Julian F. Smith (2)

L 58497-65 EWT(m)/EPF(c)/EPF(j) PC-4/Pr-4 RUR/0020/64/159/003/0619/0621  
ACCESSION NR: AP5019584

AUTHOR: Proskurnina, M. V.; Novikova, Z. S.; Lutsenko, I. F.

27  
25

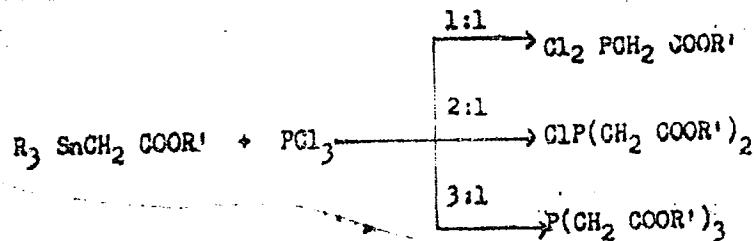
B

TITLE: Derivatives of Carbalkoxymethylphosphinous acids

SOURCE: AN SSSR. Doklady, v. 159, no. 3, 1964, 619-621

TOPIC TAGS: ester, acetic acid, organic phosphorus compound

ABSTRACT: It was established that by reacting triethyl or tributyl-stanny-acetic acid esters with  $\text{PCl}_3$  and varying the ratio of reagents, compounds of the following types could be synthesized:



Card 1/2

L 58499-65

ACCESSION NR: AP5019584

2

The yields of the products were 80-90%. Monoalkyl dichlorophosphites and dialkyl monochlorophosphites reacted similarly:  $R_3^{\prime}SnCH_2COOR' + (R''O)_2PCl \rightarrow$

$\rightarrow (R''O)_2PCH_2CCOR'$ . Esters of substituted phosphinic acids of this type could also be prepared starting from the chlorophosphines prepared by the reaction with trialkylstannylacetic acid esters. All derivatives of trivalent  $P$  that were synthesized underwent oxidation in air with spontaneous heating. By passing air through ether solutions of tris-(carbaoxy)-methylphosphines, the corresponding oxides were obtained. The following compounds were prepared:  $RPCl_2$ ,  $R^{\prime}PCl_2$ ,  $R_2^{\prime}POCl$ ,  $R_3^{\prime}P$ ,  $R_3^{\prime}P'$ ,  $RP(OEt)_2$ ,  $R^{\prime}P(OEt)_2$ ,  $R_2^{\prime}POEt$ ,  $R_3^{\prime}PO$ ,  $R_3^{\prime}PO'$  (where  $R = CH_2COOMe$  and  $R' = CH_2COOEt$ ).

Orig. art. has: 1 table.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow  
State Universitiy)

SUBMITTED: 09Jul64

ENCL: 00

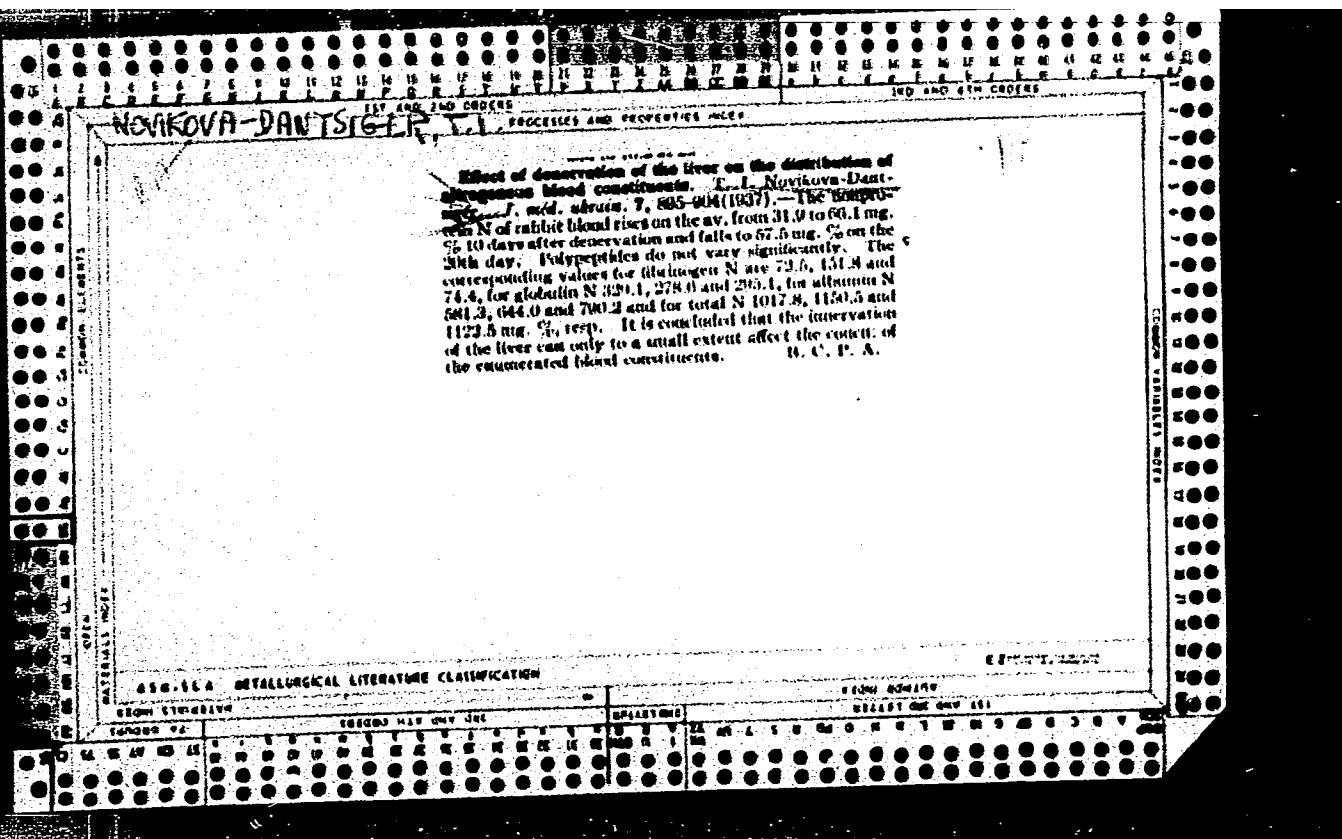
SUB CODE: OC,GC

NR REF Sov: 005

OTHER: 000

JPRS

Card 2/2



NOVIKOVA-DANTSIGER, T.I., starshiy prepodavatel'.

Role of the nervous system in the permeability of salivary glands. Dop.ta pov.L'viv.un. no.3 pt.2:20-21 '52. (MLRA 9:11)

(SALIVARY GLANDS)

~~NOVIKOVA-DANTSIGER, T.I.~~

~~Effect of blood transfusion on cholesterol metabolism. Probl.gemat. i  
perel.krovi 2 no.3:41-46 My-Je '57.~~  
(MLRA 10:8)

1. Iz L'vovskogo nauchno-issledovatel'skogo instituta perelivaniya  
krovi (dir. - dotsent D.G.Petrov)  
(CHOLESTEROL, in blood,  
eff. of blood transfusion (Rus))  
(BLOOD TRANSFUSION, effects,  
on cholesterol metab. (Rus))

YAVES, S.B.; NOVIKOVA-DANTSIGER, T.I.; AKIMOVA, R.N.; KRIVORUCHKO, R.A.

State of hemopoiesis and gases of the blood in transfusions  
of blood preserved with cation exchangers following hemorrhages.  
Sbor. trud. L'vov. nauch.-issl. inst. perel. krovi i neotlozh.  
(MIRA 16:12)  
khir.no.4:168-176 '60

NOVIKOVA-DANTSIGER, T.I.

Effect of hemotransfusion on the cholesterol content in the  
blood serum following acute hemorrhages. Sbor. trud. L'vov.  
nauch.-issl. inst. perel. krovi i nectlozh. khir. no.4;  
177-188 '60 (MIRA 16:12)

AKIMOVA, R.N.; KRIVORUCHKO, N.A.; YAES, S.B.; NOVIKOVA-DANTSIGER, T.L.

Effect of transfusion with cationized blood on the hemodynamics,  
blood proteins, and phagocyte activity of the leukocytes in blood  
loss. Probl.gemat.i perel.krovi 5 no.6:50-55 Je '60.

(MIRA 13:12)

(HEMORRHAGE) (BLOOD TRANSFUSION) (BLOOD PROTEINS)  
(PHAGOCYTOSIS)

NOVIKOVA-DANTSIGER, T.I.

Glycolytic processes in washed out erythrocytes and the effect of  
sodium lactate on them. Comat, i perel, krovi 1:65-68 '65.  
(MIRA 18:10)  
1. N'govskiy institut perelivaniya krovi.

TOME, M.F.; NOVIKOVAS, E.A.; KARPAVICIUTE, M., red.

[General zootechny] Bendroji zootechnija. Vilnius, Leidykla  
"Mintis," 1965. 486 p. [In Lithuanian]  
(MIRA 18:6)

NOVIKOVSKAYA, N.A.; ROTENBERG, I.L.; KLEPTSOVA, A.P.

Chemical reagents. Standartizatsiia 27 no.12:42-44 D '63.  
(MERA 17:4)

SHEBERSTOV, V.I.; KANTOR, F.P.; NOVIKOVSKAYA, N.A.

New state standards for methol, hydroquinone and sodium sulfite.  
Zhur.nauch.i prikl.fot. i kin. 5 no.6:473-476 N-D '60.

(MIRA 14:1)

(Photography—Developing and developers—Standards)

LASTOVSKIY, R.P.; MIKHAYLOV, G.I.; NOVIKOVSKAYA, N.A.; PETROV,  
D.A.; DANSKER, V.L.; MOREVA, Ye.V.; FRIKEL', G.E.,  
red.; PIROZHKOVA, A.I., tekhn. red.

[Urea for intravenous injection] Mochevina dlja vnutri-  
vennogo vvedeniia. Moskva, Vses. nauchno-issl. in-t khim.  
reaktivov i osobu chistykh khimicheskikh veshchestv, 1962.  
(MIRA 16:7)  
10 p.  
1. Russia (1923- U.S.S.R.) Sovet Ministrov. Gosudarstvennyy  
komitet po khimii.

(UREA—THERAPEUTIC USE)

Novikovskiy, B.S.

AUTHOR:

Novikovskiy, B. S.

89-2-10/35

TITLE:

High-Voltage Sources for Single-Shot Strongly Focusing Accelerators  
(Ob istochnikakh vysokogo napryazheniya dlya sil'notochnykh uskoriteley odnokratnogo deystviya).

PERIODICAL: Atommaya Energiya, 1958, Nr 2, pp. 175-178 (USSR).

ABSTRACT:

For the purpose of obtaining protons with 2 - 3 MeV with a current intensity of some ten mA electrostatic generators cannot be used any more. For this reason, interest is directed again to the cascade generator. The principal disadvantage of the simple cascade generator is constituted by the fact, that the output voltage is strongly pulsating and possesses a great internal resistance. If, however, the regular cascade scheme is connected double (symmetrical) or threefold, that is to say in parallel, it can be shown experimentally as well as by computation, that this system becomes useful for the purpose mentioned in the beginning. It is recommendable to employ the symmetric scheme in plants, where the main stress is laid upon voltage stability. In plants, which are destined to deliver extremely high values of voltage and current, it is better to employ the three-phase system. There are 7 figures, 1 table.

Card 1/2

High-Voltage Source for Single-Shot Strongly Focusing Accelerators. 89-2-1a/35

SUBMITTED: June 27, 1957.

AVAILABLE: Library of Congress.

Card 2/2

1. Proton accelerators-Design    2. Accelerators

<p><i>Avt Kouskiy, B.S.</i></p> <p>9030) NAME &amp; BOOK NUMBER Avtokhimiya and Nauka. Electrostatic Generators Electrostatic PP generator; shemit'stav (Electrostatic Generators; Construction of articles) Moscow, Atomizdat, 1959, 25 p., 1,100 copies printed.</p> <p>This collection of articles may be useful to scientists and engineers working with high-voltage electrostatic generators.</p> <p>The author discusses the construction and operation of a number of electrostatic generators developed in the USSR and describes methods of releasing negative hydrogen ions. They discuss the operation of accelerating chambers and present methods of stabilizing accelerator voltages. No per- sonalities are mentioned. References appear at the end of some articles.</p>	<p>807/2765</p> <p>15</p> <p>1. G. I. Krugly, A. D. Filatov, I. P. Prokof'ev. Production of Accelerating Beams of Negative Hydrogen Ions by Circularizing Positive Ions. In: A Catalogue of Works of a High-frequency Bureau and Positive Ions. The author discusses a negative hydrogen ion source based on the pro- duction of a negative ion beam by circularizing positive ions in a gas flowing through a cathode channel of a high-frequency source. They also derive expressions for determining amounts of negative hydrogen ions in this beam. There are 11 references. 2 Soviet, 1 English and 1 reference.</p>	<p>15</p> <p>2. V. A. Kozhevnikov and T. M. Fomichev. Production of Accelerating Beams of Negative Hydrogen Ions by Circularizing Positive Ions. In: A Catalogue of Works of a High-frequency Bureau and Positive Ions. The author discusses a negative hydrogen ion source based on the pro- duction of a negative ion beam by circularizing positive ions in a gas flowing through a cathode channel of a high-frequency source. They also derive expressions for determining amounts of negative hydrogen ions in this beam. There are 11 references. 2 Soviet, 1 English and 1 reference.</p>	<p>15</p> <p>3. V. A. Kozhevnikov and T. M. Fomichev. Testing of a New Electrostatic Accelerator Developed by PT Al' Dzhur. The author discusses the construction of a number of acceler- ators and describes setting of these tubes in a high electro- static accelerator. He also discusses the results of testing and per- forming the optimization of the electric field in a tube with combined acceleration. There is 1 Soviet reference.</p>	<p>22</p> <p>4. Yu. N. B. Aleshinetsky and I. P. Shcherbinin. Generation of negative ions in Helium, Carbon, Oxygen and Chlorine When Passing Positive Ions. In: A Catalogue of Works of a High-frequency Bureau and Positive Ions. The author studies the formation of positive ions of helium, carbon, oxygen and chlorine when formes are passed through a negative gas or mixture of gases. They also consider the possibility of producing a source of heavy negative ions and present expressions showing variation of the transformation coefficient via temper- ature and ion energy. There are 7 references. 3 Soviet and 1 English reference.</p>	<p>15</p> <p>5. V. A. Kozhevnikov and I. P. Shcherbinin. Electrostatic Accelerator as an Accelerator of high-energy particles for accelerators. He describes basic features of these generators and considers the operation of generator ion sources. He also discusses control and supply circuits of ion sources and nearly developed generators. There are no references. 2 Soviet and 1 reference.</p>	<p>15</p> <p>6. V. A. Kozhevnikov and I. P. Shcherbinin. Study of Electric Strength of Some Inert Gases and Gaseous Mixtures With the Aid of an Electrostatic Generator. The author discusses a compact electrostatic generator developed in the laboratory of PT Al' Dzhur and used in testing electric strength of compressed gases and gaseous mixtures such as carbon dioxide, nitrogen, hydrogen and mixtures of nitrogen and carbon dioxide, nitrogen and an electrically negative gas (methyl chloride (MPC), carbon dioxide and sulfur hexafluoride). They discuss the experi- mental setup, discuss the procedure used in testing and present ex- perimental results. There are 22 references. 11 English and 1 reference.</p>
---	---	---	---	---	--	---

SOV/120-59-4-34/50

AUTHOR: Novikovskiy, B. S.

TITLE: Voltage Stabilization with a Retarding Gap for a High-Voltage Accelerator

PERIODICAL: Pribory i tekhnika eksperimenta, 1959, Nr 4, pp 140-141  
(USSR)

ABSTRACT: The system is illustrated by Fig 1; the last gap in the cascade generator is used to adjust the final energy of the ions. The voltage across this gap is controlled by the grid bias on the valve on the left, which bias is itself controlled by the relation between the ion currents reaching the two stop plates and the target (the ions reach the target after passing through the magnetic analyzer 4). Unit 3, in addition to providing the bias, also provides a signal to the servo 5, 6, which adjust the voltage supplied to the rectifier chain. Fig 2 shows the output voltage (kV) as a function of mains voltage, 1) without the stabilizer, 2) with the stabilizer. Some details are given of unit 3; the anode loads of the amplifiers are lamps, which pass their light

Card 1/2

SOV/120-59-4-34/50

Voltage Stabilization with a Retarding Gap for a High-Voltage Accelerator

to a photocell in unit 2. This gives a maximum response frequency of 10 c/s. The paper contains 2 figures and 4 references, 1 of which is Soviet and 3 English.

SUBMITTED: April 9, 1958.

Card 2/2

BEREZHOV, B., inzh.; NOVIKOVSKIY, V., inzh.

Water in a spiral. Izobr. i rats. no.12:5-6 '63.  
(MIRA 17:2)

NOVIKOVSKIY, V.E., inzh.; MEDOSOV, Yu.G., inzh.

Colmatation of canals in the Kara Kum. Gidr. i mel. 12 no. 12:39-  
47 D '60. (MIRA 14:1)

(Kara Kum Canal--Seepage)

NOVIKOVSKIY, V.E., inzh.; SOKOL'SKAYA, V.V., inzh.

Use of synthetic materials to prevent water losses due to seepage  
from canals and reservoirs. Gidr. i mel. 13 no.4:22-29 Ap '64.  
(MIRA 14:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrotekhniki i  
melioratsii im. A.N.Kostyakova.  
(Seepage) (Irrigation canals and flumes)  
(Reservoirs)

15-57-2-1743

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 2,  
p 87 (USSR)

AUTHORS: Novin, R. B., Sergeyeva, R. T.

TITLE: A Study of the Conditions of Leaching Turquoise  
(Izuchenie usloviy vyshchelachivaniya biryuzy)

PERIODICAL: Sb. nauch. tr. Gos. n.-i. in-ta tsvet. met., 1955,  
Nr 10, pp 177-182

ABSTRACT: Bibliographic entry  
Card 1/1

NOVIN, R.B.; SKEPNER, Ye.B.

Theory of cement copper flotation. Sbor. nauch. trud. Gintsvetmeta no.19:103-118 '62. (MIRA 16:7)

(Copper—Electrometallurgy)  
(Flotation)

NOVIN, R.B.; SHCHERBAKOV, V.A.

Combination method for the ore dressing of oxidized copper ores.  
Sbor. nauch. trud. Gintsvetmeta no.19:130-147 '62.

(MIRA 16:7)

(Ore dressing) (Copper ores)

NOVIN, R.B.; SHCHERBAKOV, V.A.

Ways of increasing the recovery of copper at the Almalyk Ore  
Dressing Plant. TSvet. met. 35 no.5:11-17 My '62. (MIRA 16:5)  
(Almalyk--Ore dressing) (Copper--Metallurgy)

NOVINA, K.P., RUMYANTSEVA, Z.M., FARBEROVA, M.I., EPSTEIN, V.G.

Rubber transformation with an aldehyde group in the rubber.

Report submitted for the 4th Scientific research conference on the chemistry  
and technology of synthetic and natural rubber. Yaroslavl, 1962

ACCESSION NR: A5623927

4/30/87/62/001/000/0147/0153

AUTHOR: Ephteyn, V. G.; Novina, L. P.

TITLE: Properties of rubber mixtures and vulcanizers containing polyethylene

SOURCE: Yaroslavl'. Tekhnologicheskiy institut. Khimika i khimicheskaya tekhnologiya, vol. 1, 1962, 147-153

TOPIC TAGS: rubber mixture, vulcanizer, vulcanization, polyethylene, resin, butadiene, styrene

ABSTRACT: The authors tested the action of polyethylene manufactured by Soviet industry in rubber mixtures. Two types of polyethylenes were used; that produced at low pressure and at high pressure. The results of the testing of the two types on various types of rubber are presented in tables. In each instance, a decrease of elasticity accompanied a strengthening of vulcanizers of various caoutchouc by both types of polyethylene. Growth of residual lengthening, an increase of the modulus of internal friction, a relaxation increase, and an increase of a greater fall of moduli upon repeated deformations were observed. This indicated that the strength in rubber with polyethylene was created because of the forces of intermolecular attraction which increased the internal friction in the vulcanizers during deformation.

Card 1/2

ACCESSION NR: AD4029927

tion. Introduction of low-pressure polyethylene in rubber mixtures, especially based on butadiene-styrene copolymers can have great practical application. Firstly, polyethylene can serve to produce solid high module mixtures on the artificial leather type and, secondly, natural rubber polyethylene can be used for decreasing the shrinkage in any production mixtures. Orig. ext. has: 4 tables and 1 figure.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 234566

EXCL: 00

SUB CODE: CH

NO KEY Sov: 002

OTHER: 001

Card 2/2

NOVINENKO, A. I.

NOVINENKO, A. I. "Insects as 'actors of Mosaic Diseases of Sugar Beets,'" in *Mosaic Diseases of Sugar Beets*, a Collection of Articles, Publishing House of the Variety-Seed Administration of Sugar Industries, Liov, 1930, pp. 99-111. 464.04 Sa2

SO: SIRA SI - 90-53, 15 December 1953

VOLKOV, V.M.; NOVIN'KOV, A.G.

Analysis of transient processes in a tuned amplifier with  
high-speed automatic gain control. Radiotekhnika 19 no.6:  
24-31 Je '64.  
(MIRA 17:10)

1. Deyatvitel'ryys chleny Nauchno-tekhnicheskogo obshchestva  
radiotekhniki i elektronsvyazi imeni Popova.

VOLKOV, V.M.; NOVIN'KOV, A.G.

Analysis of transient processes in a bandpass IF amplifier with  
instantaneous gain control according to the radio pulse envelope  
at large signal levels. Izv.vys.ucheb.zav.; radiotekh. 7 no.5:624-  
628 S-0 '64. (MIRA 18:4)

NOVINKOVA, T. F.

"The Results of Disinfecting the Air in an Infectious Hospital by  
Means of Ultraviolet Rays." Cand Med Sci, Gor'kiy Medical Inst, Gor'kiy  
1954. (RZhBiol, No 3, Feb 55)

SO: Sum. No. 631, 26 Aug 55 - Survey of Scientific and Technical  
Dissertation Defended at USSR Higher Educational Institutions.  
(14)

AID P - 5069

Subject : USSR/Engineering-Welding

Card 1/1 Pub. 107-a - 9/11

Author : Novinshteyn, B. D.

Title : ~~Repair welding of 3,000-ton hydraulic press~~

Periodical : Svar. proizv., 6, 30-31, Je 1956

Abstract : Three large cracks in 57-ton upper cross member of the "Fel'zer" steam-hydraulic press were welded. Also-one broken column was welded and worn-out threads on both columns of the press were bonded and re-threaded. The author describes the technique of the work done in June 1955. The repaired press has been in operation since that time. Five drawings are illustrating the procedure.

Institution : None

Submitted : No date

NOVINSKAYA, A. V.

Dissertation: "Treatment of Hypertension by an Ultrahigh-Frequency Electric Field."  
Cand. Med Sci, Central Inst for the Advanced Training of Physicians, 1 Jun 54.  
Vechernyaya Moskva, Moscow, 21 May 54.

SO: SUM 284, 26 Nov 1954

NOVINSKAYA, A.V.  
NOVINSKAYA, A.V.

Result of action on the cerebral cortex in the treatment of  
hypertension [with summary in French]. Zhur.nevr. i psikh. 57  
no.9:1152-1156 '57. (MIRA 10:11)

(DIATHERMY,  
ultrahigh frequency irradiation of cerebral cortex  
in ther. of hypertension (Rus))

(HYPERTENSION, therapy,  
ultrahigh frequency irradiation of cerebral cortex (Rus))

(CEREBRAL CORTEX, effect of irradiations  
ultrahigh frequency waves, in ther. of hypertension (Rus))

5/18/61/004/003/018/020  
E14/E435

16,8000

AUTHOR: Novinskaya, G.A.

TITLE: The dynamics of a simple extremal regulator with oscillatory search

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiofizika, 1961, Vol.4, No.3, pp.566-572

TEXT: A simplified model of extremal regulator is examined. Search is carried out over a parabolic object characteristic with one or two maxima (solid line in Fig.12). Three stable limit cycles are found, C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>, in Fig.12, in dependence on the system parameters. The work was carried out as a graduation exercise under Yu.I.Neymark in 1959. There are 12 figures and 3 Soviet-bloc references.

ASSOCIATION: Nauchno-issledovatel'skiy fiziko-tehnicheskiy institut pri Gor'kovskom universitete (Scientific and Research Physicotechnical Institute at Gor'kiy University)

SUBMITTED: December 6, 1960

Card 1/21

✓  
B

NOVINSKAYA, G.M.

NOVINSKAYA, G.M.; FESHKOVSKIY, G.V.

Emission of *Mycobacterium tuberculosis* by intestinal and gastric walls in experimental tuberculosis in dogs. Probl.tub. no.2:57-61  
(MLRA 7:5)  
Mr-Ap '54.

1. In laboratorii kafedry patologicheskoy fiziologii (sav.prof.  
G.V.Feshkovskiy) Molotovskogo meditsinskogo instituta (dir.prof.  
S.P.Namoyko).

(TUBERCULOSIS, experimental,  
\*emission of *M. tuberc.* by intestinal & gastric walls in dogs)  
(GASTROINTESTINAL SYSTEM, in various diseases,  
\*exper. tuberc., emission of *M. tuberc.* by intestinal & gastric  
walls in dogs)

NOVINSKAYA, S. M.

Changes in the motor activity of the small intestine in dogs in  
experimental tuberculosis. Arkh.pat. 18 no.4:108 '56 (NIRA 11:10)

1. Iz kafedry patologicheskoy fiziologii (zav. - prof. G.V. Peshkovskiy)  
Molotovskogo meditsinskogo instituta.  
(INTESTINES)  
(TUBERCULOSIS)

NOVINSKAYA, G.M.  
NOVINSKAYA, G.M. (Molotov)

Changes in the secretory activity of the upper segments of the small intestine in experimental tuberculosis in dogs. Pat.fiziol. i eksp. terap. 1 no.4:52-53 Jl-Ag '57. (MIRA 10:11)

1. Iz kafedry patologicheskoy fiziologii (zav. - prof. G.V.Peshkovskiy) Molotovskogo meditsinskogo instituta.  
(TUBERCULOSIS, experimental,  
small intestinal secretory funct. in (Rus))  
(INTESTINE, SMALL, physiology,  
secretory funct. in exper. tuberc. (Rus))

BUDYACHEVSKIY, A.T.; VEKSLERCHIK, R.A.; MOREVA, A.G.; NAVROTSKIY, D.S.;  
NOVINSKAYA, I.N.

Emergency aid in acute coronary insufficiency. Kardiologija  
5 no.1:87-88 Ja-F '65. / (MIRA 18:9)

1. TSentral'naya stantsiya skoroy meditsinskoy (glavnnyy vrach  
N.K. Gavrilova; nauchnyy rukovoditel' - prof. S.V. Shestakov),  
g. Kuybyshev.

NOVINSKAYA, L.D. (Moskva)

In vivo diagnosis of hepatic hemangioma. Klin.med. 35 no.4:122-124  
(MIRA 10:7)  
Ap '57.

1. Iz chetvertogo upravleniya Ministerstva zdravookhraneniya SSSR  
(glavnnyy vrach I.S.Mironenko, nauchnyy rukovoditel' - doktor  
meditsinskikh nauk V.I.Ivanov-Vesnayev)  
(LIVER, neoplasms  
angiom, diag.)  
(ANGIOMA, diag.  
liver)

1. NOVINSKAYA, V. F.

2. USSR (600)

4. Furacilin

7. Oral treatment of trypanosomiasis with furacilin. Latv. PSR Zin. Akad. Vestis.

4, 1951

Latvijas Padomju Socialistiskas  
Republikas Zinatnu Akademija, Riga

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

NOVINSKAYA, V. F.

4727. NOVINSKAYA, F. V. Tripanozomoz (su-auru) verblyudov i loshadey i  
bor'ba s nim. alma-ata, izd-vo akad. nauk kazssr, 1954. 28s. s ill.  
20 sm. (akad. nauk kazakh. ser zool. nauka -- sel'skому khozyaystvu. 5)  
2.000 ekz. 30 k. -- (55-25) P 619:616.937

SO: Letopis' Zhurnal' nykh Statey, Vol. 7, 1949