ACC NR: AP6009507 (A) SOURCE CODE: UR/0413/66/000/005/0011/0011

AUTHOR: Kiya-Oglu, N. V.; Napalkov, N. A.; Rotenberg, I. P.; Bondarenko, S. G.; Gushchin, V. Ya.; Modina, Z. V.; Bunina, Ye. D.; Zamyatin, K. K.

ORG: none

TITLE: Method of preparing foamed pavinal. Class 8, No. 179269

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 5, 1966, 11

TOPIC TAGS: pavinal, polyvinylchloride coating, pore former

ABSTRACT: An Author Certificate has been issued describing a method for preparing foamed pavinol by applying polivinylchloride paste containing plasticizers, stabilizers, pigments, and the pore former ChKhZ21 to a cloth base. To speed up the process, the paste applied to the cloth is heated to 180-200C. Subsequently, the coating obtained can be printed. [LD]

SUB CODE: 11/ SUBM DATE: 01Aug62/

UDC: 678.026.3
743.22:677.865.2

Card 1/1

S/081/61/000/001/001/017
A005/A105

Translation from: Referativnyy zhurnal, Khimiya, 1961, No. 1, p. 37, # 1B273

AUTHOR: Bondarenko, S. I.

TITLE: The Study of the Temporal Courses of Polarization and Depolarization in Solid Solutions

PERIODICAL: "Tr. Novocherk. politekhn. in-ta", 1959, No. 73, Rabcty Kafedry fiz., pp. 35 - 41

TEXT: The author shows that the polarization process of a solid solution of $Ba(TiZr)O_3$ in the seignettoelectric region consists of no less than two processes which have different relaxation time. Also in the non-seignettoelectric region, the polarization process consists of two mechanisms: 1) elastic displacement of electrons and ions, and 2) ion drift (thermal ion polarization). The dielectric losses noticeably increase in the solid solution of $Ba(TiZr)O_3$ at 150°C and higher. Setting in at 250°C, the properties of the considered solid solution approach the properties of the semiconductors. Author's summary

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

Card 1/1

KUDRYASHOV, G.V., inzh.; BONDARENKO, S.I., inzh.

Making 578.6 m of crosscut in 31 days. Shakht. stroi. 4 no. 17-19 Mr '60. (MIRA 13:11)
(Mine engineering)

15,2141

S/058/62/000/009/015/069
A006/A101

AUTHOR: Bondarenko, S. I.

TITLE: Temporary processes in glass enamels

PERIODICAL: Referativnyy zhurnal, Fizika, no. 9, 1962, 12, abstract 9D81 ("Tr. Novocherk. politekhn. in-ta", 1961, 118, 35 - 47)

TEXT: The temporary course of high-voltage polarization was studied on glass enamels containing 0 - 25% $CaTiO_3$ and $SrTiO_3$. From an analysis of oscillograms the conclusion is drawn on the process as a function of merely one high-speed mechanism of electronic and ionic polarization. At over 259°C another slow mechanism begins to act, namely the polarization of thermal ionic migration, mainly in enamels containing $SrTiO_3$. During the capacitor discharge which is coated with enamels of different compositions, the capacitance does almost not change (except a temperature of about 300°C), the dielectric constant changes slightly with temperature and increases with a higher content of titanates, as well as specific capacitance.

[Abstracter's note: Complete translation]

O. Molchanova

Card 1/1

BONDARENKO, S.Kh.

On collective cotton farms. Zashch. rast. ot vred. i bol. 3 no.4:8-9 Jl-Ag '58. (MIRA 11:9)

1. Nachal'nik otdela zashchity rasteniy obsel'khozupravleniya.
(Cotton--Diseases and pests)
(Spraying and dusting equipment)

NESTEROV, Yu.B.; BONDARENKO, S.Kh., agronom-entomolog; DUBROVIN, B.L., agronom-entomolog

Possibilities for using the AG-L6 aerosol generator in cotton growing. Zashch. rast. ot vred. i bol. 3 no.4:16-17 Jl-Ag '58. (MIRA 11:9)

1. Starshiy agronom-entomolog Ministerstva sel'skogo khozyaystva UzSSR (for Nesterov). 2. Tashkentskoye oblsel'khozupravleniye (for Bondarenko, Dubrovin).

(Cotton--Diseases and pests) (Aerosols)

BONDARENKO, S.K.

Wardium lagopi nov. sp. (Hymenolepididae), a new cestode from willow ptarmigan. Trudy Gel'm. lab. 15:64-66 '65
(MIRA 19:1)

KREMS, A.Ya; ZDOROV, S.F.; BONDARENKO, S.M.; ADAMOV, A.I.; ZOTKIN, M.M. redaktor; SHMELEV, A.A., redaktor; POLOSINA, A.S., tekhnicheskiy redaktor.

[Oil mining] Shakhtanaia razrabotka neftianykh mestorozhdenii. Pod red. M.M. Zotkina i A.A. Shmeleva, Moskva, Gos. nauchno-tekhn. izd-vo neftianoi i gornotoplivnoi lit-ry, 1955. 273 p. (MLRA 8:8)
(Petroleum engineering)

SOV/112-58-3-4550

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1958, Nr 3, p 167 (USSR)

AUTHOR: Bondarenko, S. P.

TITLE: Production Automation Should Be Broadened
(Shire vnedryat' avtomatizatsiyu v proizvodstvo)

PERIODICAL: Mekhaniz. sil's'k. gospodarstva, 1957, Nr 6, pp 21-23 (original in Ukranian)

ABSTRACT: A review of automatic devices used in agricultural production is presented. An experimental cultivator model has been built intended for working technical crops sown by the square-pocket method; the swivel shovels working the soil between the pockets are actuated by a signal from a contact feeler; the latter energizes a relay on contact with the plant. VIM has developed a system for automatic regulation of the crop mass feed into the thrasher in a trailer-type combine, by changing the speed of the combine as it moves over the field. A brief description is provided of automatic schemes

Card 1/2

Production Automation Should Be Broadened

for liquid pumping, including those with a pressure tank, with a floating-type pickup, and with an air-water boiler where the pickup is represented by a pressure relay. Since 1953, a no-tower electric pumpwork VE-2.5 has been widely used; since 1956, VE-2.5M water-pumping units have been manufactured and combined with an additional control station developed by VIM and VIESKh. A no-float signaling system with contact-type level pickup has been developed for non-winterized towers where the water surface may be covered with ice in winter; a sketch of the contact pickup is given. A short characterization is offered of the schemes maintaining specified temperature in electric incubators, animal-breeding barns, electric hot-houses, etc., as well as a scheme for maintaining the specified humidity level in the "Rekord-39" incubators; also, a schedule maintaining scheme for the same incubator. The trends in new automation projects in agriculture are listed. Illustrations: 3.

I.M.Sh.

BONDARENKO, S.P., kandidat tekhnicheskikh nauk.

The Faculty of Electrification of the Ukrainian Agricultural Academy is 25 years old. Mekh. sil'. hosp. 8 no.9:32 S '57. (Electricity in agriculture--Study and teaching) (MLRA 10:9)

MARTYNENKO, Ivan Ivanovich, kand.tekhn.nauk; BONDARENKO, S.P., kand. tekhn.nauk, glavnyy red.

[New developments in rural electrification] Nove v elektryfikatsii sil'skoho hospodarstva. Kyiv, 1959. 30 p. (Tovarystvo dlia poshyrennia politychnykh i naukovykh znan' Ukrains'koi RSR. Ser.6, no.13). (MIRA 13:1)
(Rural electrification)

BUDZKO, I.A., akademik, otv.red.; BONDARENKO, S.P., kand.tekhn.nauk, zamestitel' otv.red.; MARTYNENKO, I.I.; KARPOV, I.V., red.; OLEYNIK, V.S., red.; KOSOVSKIY, V.A., red.; KVITKA, S.P., khudozhestvenno-tekhn.red.

[Problems connected with electric power supply to agriculture; collection of articles on materials of the scientific session of the section of the electrification of agriculture] Voprosy elektrosnabzheniia sel'skogo khoziaistva; sbornik statei po materialam nauchnoi sessii sektsii elektrifikatsii sel'skogo khoziaistva. Kiev, Izd-vo Ukr.akad.sel'khoz.nauk, 1959. 149 p. (MIRA 13:2)

1. Kiyev. Ukrains'ka akademiia sil's'kohospodars'kykh nauk. 2. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk imeni V.I. Lenina, direktor Vsesoyuznogo nauchno-issledovatel'skogo instituta elektrifikatsii sel'skogo khozyaystva (VIESKh) (g.Moskva) (for Budzko).

(Electricity in agriculture)

BONDARENKO, S.P., kand.tekhn.nauk

Using electric driving on collective and state farms.
Mekh.sil'.hosp. 10 no.11:26-28 N '59. (MIRA 13:3)
(Electric driving)

BONDARENKO, S.P.

"Utilization of electric energy in agriculture". Reviewed by S.P. Bondarenko. Mekh. i elek. sots. sel'khoz. 17 no.2:62-63 '59. (MIRA 12:6)

(Electricity in agriculture)

MARTYNENKO, Ivan Ivanovich, kand.tekhn.nauk; BONDARENKO, S.P., kand.tekhn.nauk, otv.red.; GURENKO, V.A. [Hurenko, V.A.], red.

[Operating electric equipment on collective and state farms] Ekspluatatsiia elektrohospodarstva v kolhospakh i radhospakh. Kyiv, 1960. 31 p. (Tovarystvo dlia poshyrennia politychnykh i naukovykh znan' Ukrains'koi RSR. Ser.6, no.22). (MIRA 14:2)

(Electricity in agriculture)

BONDARENKO, S.P., kand.tekhn.nauk

Scientific investigations on the over-all electrification of agriculture in the Ukraine. Mekh. i elek. sots. sel'khoz. 19 no.1: 63-64 '61. (MIRA 14:3)
(Ukraine--Electricity in agriculture)

RUBTSOV, P.A., kand. tekhn. nauk; OSETROV, P.A., kand. tekhn. nauk; BONDARENKO, S.P., kand. tekhn. nauk; SAVINKOV, K.P., ~~kand. tekhn.~~ nauk; SOLODENIKOVA, G.A., red.

[Use of electrical power in agriculture] Primenenie elektricheskoi energii v sel'skom khoziaistve. Izd.2., perer. i dop. [By] P.A.Rubtsov i dr. Moskva, Kolos, 1964. 502 p. (MIRA 17:10)

BONDARENKO, S.P.

Genetic types in the carbonate sediments of the Kartamysh series (copper-bearing sandstones) in the Bakhmut trough and the conditions of their accumulation. Geol. zhur. 25 no.3:66-78 '65. (MIRA 18:11)

1. Trest "Artemgeologiya".

BONDARENKO, S.P.

New data on the Kramatorskaya and Dronovskaya series of the Donets Permian. Geol. zhur. 23 no.2:23-32 '63. (MIRA 16:6)

1. Trest "Artemgeologiya".
(Donets Basin—Geology, Stratigraphic)

BONDARENKO, S.S., elektromonter.

Sulfite level gauge and its use. Bum.prom. 30 no.11:23 N '55.
(MLRA 9:2)

1.Vyborgskiy tsellyulozno-bumazhnyy kombinat.
(Vyborg--Paper industry)

BONDARENKO, S.S.

Woodpulp cooking control instrument. Bum.prom. 31 no.5:21 My '56.
(MLRA 9:8)

1. Elektromonter Vyborgskogo tsellyulozno-bumazhnogo kombinata.
(Vyborg--Woodpulp industry)
(Photoelectric measurements)

BONDARENKO, S.S.; KASHANSKIY, B.R.; KAPUSTIN, V.Ya.; KRAMARENKO, P.T.; LOVI, A.A.; MIKHEYEV, I.V.; POLETAYEV, A.S.; SELEZNEV, V.I; SUDAKOV, S.V., polkovnik, red.; VIL'CHINSKIY, I.K., red.

[Instruction in firing at night from small arms and grenade launchers] Obuchenie strel'be noch'iu iz strelkovogo oruzhiia i granatometa. Moskva, Voenizdat, 1964. 214 p.
(MIRA 18:4)

BONDARENKO, S.S., Cand Geol Min Sci -- (diss) "Method for prospecting of underground iodo-bromine waters (On example of Volgo-Ural'skaya Oblast)." Mos, 1958 (Min of Higher Education USSR. Mos Geol Prospecting Inst im S. Ordzhonikidze) 110 copies (KL, 23-58, 103)

AUTHOR: Bondarenko, S.S. 132-58-4-9/17

TITLE: Special Features of Prospecting for Underground Iodine-Bromine Waters (Nekotoryye osobennosti razvedki podzemnykh iodo-bromnykh vod)

PERIODICAL: Razvedka i Okhrana Nedr, Nr 4, pp 37-41 (USSR) 1958

ABSTRACT: At present, prospecting for underground iodine-bromine waters is very expensive. A proposed plan of conducting simultaneous prospecting and exploring operations is given. These operations are divided into two basic stages. The prospecting stage consists in locating the iodine-bromine water deposits and the drilling of prospecting wells. The exploration stage consists in determining the exploitation reserves by hydrogeological investigations of test wells and extensive study of the system of flow of the underground waters, its magnitude, and also the technical conditions of the wells.
There are 5 references, 4 of which are Soviet and 1 English.

ASSOCIATION: MGRI
AVAILABLE: Library of Congress

Card 1/1 1. Iodine-Sources 2. Bromine-Sources 3. Chemical elements-Sources

BONDARENKO, S.S.

Basic characteristics of the hydrogeology of the Volga-Ural artesian basin. Izv.vys.ucheb.zav.; geol.i razv. 2 no.11:85-97 N '59. (MIRA 13:6)

1. Moskovskiy geologorazvedochnyy institut im. S.Ordzhonikidze.
(Volga Valley--Water, Underground)
(Ural Mountain region--Water, Underground)

BONDARENKO, S.S.

Waters containing iodine and bromine in the Volga and Kama Valleys. Sov.geol. 2 no.12:88-100 D '59. (MIRA 13:5)

1. Moskovskiy geologorazvedochnyy institut imeni S. Ordzhonikidze.
(Kama Valley--Brines) (Volga Valley--Brines)

BONDARENKO, S.S.

Dynamics of the underground waters in the West Siberian artesian basin. Izv. vys. ucheb. zav.; geol. i razv. 4 no.4:96-106 Ap '61. (MIRA 14:6)

1. Moskovskiy geologorazvedochnyy institut imeni S.Ordzhonikidze.
(Siberia, Western--Water, Underground)

S/196/62/000/024/003/014
E194/E155

AUTHOR: Bondarenko, S.T.

TITLE: Transient thermal and electrical fields in a circular insulated cylinder of unlimited length

PERIODICAL: Referativnyy zhurnal, Elektrotekhnika i energetika, no.24, 1962, 11, abstract 24 A 56. (Elektroenergetika, no.5, 1962, 141-150)

TEXT: In insulating materials whose specific resistance is strongly dependent on temperature, the electric field also changes on heating. The heating electric current (during tests or over-voltages), and hence the change of field, depend on the heat-distribution in a hollow cylinder. Solution for cylinders of unlimited length involve certain limitations concerning boundary conditions and distribution of heat sources. The present work allows for changes in the electrical conductivity of the medium and obtains solutions in n-th order Bessel functions.
4 references.

[Abstractor's note: Complete translation.]

Card 1/1

4382. TEMPERATURE FIELD IN HEATING OF COAL BY ELECTRIC CURRENT. Krukovskii, V.K. and Farberov, L.L. (Izv. Akad. Nauk S[illegible] Nauk (Bull. Acad. Sci. U.S.S.R., Tech. Sci.), June [illegible]. Experiments are recorded on the coking of Lisichansk coal [illegible] moisture, 4.4% ash and 40.7% volatiles. [illegible] of the coal was placed in an insulated box, a cylinder [illegible] major axis of it. An current from a [illegible] the cylinder. An expression was obtained for the relationship of maximum temperature and energy consumption to power, and the following figures were obtained: energy consumption in kWh/kg for the solid block 0.7 at 55[illegible] 0.78 at 800°C, and for the granular charge 0.45 and 0.61. The corresponding efficiencies (heat required for coking over heat expended) were 26.5 and 35% for the block and 41 and 45% for the charge.

4383. EXPANSION OF THE CONDUCTING CHANNEL IN TREATMENT OF SOLID FOSSIL FUELS WITH AN ELECTRIC CURRENT. Bondarenko, S.T. (Izv. Akad. Nauk SSSR, Otdel. Tekh. Nauk (Bull. Acad. Sci. U.S.S.R., Sect. Tech. Sci.), June [illegible], 108-112). The case of a block of coal being heated by a current passing through a cylindrical conducting channel is examined theoretically and an expression obtained for the increase in the radius of the channel with time. The expression is compared with the experimental data from work described in the preceding abstract and elsewhere.

BONDARENKO, S.T., (Moskva)

Expansion of the conducting channel in processing solid fuel deposits by using electric current. Izv. AN SSSR. Otd. tekh. nauk no.6:108-112 Je '56. (MLRA 9:9)

1. Energeticheskiy institut AN SSSR.
(Coal--Electric properties) (Coke)

BONDARENKO, S. T.

3

Some data on the measurement of the electrical conductivity of solid fuels. S. T. Bondarenko and A. I. Yakovlevа. *Izvest. Akad. Nauk S.S.S.R., Otdel. Tekh. Nauk* 1957, No. 3, 132–6.—The elec. cond. of various oil shales and coals was measured for d.c. and a.c. over the temp. range 500–900° at 1 and 9.6 atm. The values are given in graphic and tabular form. T. Bowtar Leach

gR

8(0); 14(5) PHASE I BOOK EXPLOITATION SOV/2079

Bondarenko, S. T., B. Kh. Brodskaya, S. N. Lyandres, E. A. Meyerovich, V. I. Pan'kovskiy, and A. D. Reznikov

Primeneniye elektricheskogo toka dlya neposredstvennogo vozdeystviya na plast topliva pri besshakhtnoy podzemnoy gazifikatsii (Use of Electric Current for Direct Action on Solid Fuel Seams in Underground Gasification Without Sinking a Shaft) Moscow, AN SSSR, 1959. 234 p. 1,600 copies printed. Errata slip inserted.

Sponsoring Agency: Akademiya nauk SSSR. Energeticheskiy institut.

Ed.: E. A. Meyerovich, Professor, Doctor of Technical Sciences; Ed. of Publishing House: P. I. Zubkov; Tech. Ed.: T. V. Polyakova.

PURPOSE: This book is intended for specialists in the coal industry concerned with the underground electrocarbonization of coal.

COVERAGE: This book describes the use of electric current for the direct treatment of underground coal beds. The authors maintain that such operations call

Card 1/10

for the use of a high-efficiency unit able to produce sufficient electric power and to effect the release of the chemical constituents in the bed. In dealing with the electrical engineering problems involved in the process the work describes the electrolinking method. The results of field tests in electrolinking are provided in the work. The system of drilling gas-permeable channels from the surface to the fuel bed is described as is the method of directing the fuel gases from the bed to the surface. The electrical conductivity of the channels may be used for subsequent electrothermal fuel processing. Theoretical and laboratory experiments in this field were first started at the Energeticheskiy Institut imeni G. M. Krzhizhanovskogo (Institute of Power Engineering imeni G. M. Krzhizhanovskiy). The first experiments conducted under actual conditions were carried out at the Estonian shale deposits near the town of Kiviyli, the greater part of the work involving experiments on coal. The Institut VNIIPodzemgaz (All-Union Scientific Research Institute of Underground Gas) took an active part in the trials and established a special laboratory for the purpose. The electro-linking method was next applied at the Moscow PGU station on coal beds. Professor E. A. Meyerovich supervised the electrical engineering problems in the book and wrote Chapters 1, 3, and 8. Chapters 2, 6, part of Chap-ters 4 and 7 were written by S. T. Bondarenko, Candidate of Technical

Sciences (ENIN AN SSSR); Chapters 9, 4, and 7 by M. B. Brodskaya, Candidate of Technical Sciences (Institut Khimii); Chapter 11 by V. I. Pan'kovskiy, Chief Engineer of the Moscow PGU station; Chapter 10 by S. N. Lyandres, Candidate of Technical Sciences (VNIIPodzemgaz). S. P. Vladimirov and V. K. Red'kin (ENIN AN SSSR) contributed data on electrical measurements for Chapter 5; A. D. Reznikov, Chief of the Laboratory of the VNIIPodzemgaz Institute, assisted in compiling the joint reports of the Institute of Power Engineering and VNIIPodzemgaz on operations conducted at the Moscow PGU station. Other personalities mentioned include: Engineers V. A. Matveyev, P. F. Skafa, and I. S. Garkuski (Glavpodzemgaz); Professor N. V. Lavrov, Doctor of Technical Sciences; I. P. Kirichenko, Candidate of Technical Sciences; Professor A. A. Agroskin; P. G. Zubkov, Candidate of Technical Sciences. The Estonian staff consisted of I. G. Kheyl', Acting Member of the Academy of Sciences, Estonian SSR; A. K. Freyberg, Chief Administrator of the Shale and Chemical Industry of Sovmarkhoz of the Estonian Republic; A. T. Kyl', Director of the Institute of Chemistry, Academy of Sciences, and I. S. Feyngol'd, Senior Scientific Worker, Institute of Chemistry, Estonian Republic. There are 60 references: 53 Soviet, 5 English, 1 German and 1 Japanese.

TABLE OF CONTENTS:

TM /fal
8-24-59

BONDARENKO, S.T.; YAKOVLEVA, A.I.

Temperature of current-conducting channels in electrolinking.
Podzem.gaz.ugl. no.3:39-43 '59. (MIRA 12:12)

1. Energeticheskiy institut im. G.M.Krzhizhanovskogo AN SSSR.
(Coal gasification, Underground)

S/057/63/033/004/018/021
B111/B238

AUTHOR: Bondarenko, S. T.

TITLE: Expansion of a gas discharge channel

PERIODICAL: Zhurnal tekhnicheskoy fiziki, v. 33, no. 4, 1963, 468-488

TEXT: The author calculates the radius of an expanding cylindrical plasma channel as a function of time. The rate of the incoming energy is taken into account. The efficiency of losses by heat conduction, radiation, convection, diffusion and sound is assumed to be small compared with the change of the energy rate dW/dt in the high temperature region of the plasma channel and with the efficiency of the shock waves. Assuming $c_v(T) = 0.44/T$ to be true, the equation $W(t) = 0.44\,\pi r^2$ is obtained, where r is the channel radius (cm). Equation

$$r = \sqrt{\frac{\int_0^t [P(t) - P_{\gamma}(t)]\,dt}{0.44} + r_0^2} = \sqrt{\frac{W(t) - W_{\gamma}(t)}{0.44} + r_0^2}, \qquad (7)$$

Card 1/2

Expansion of a gas discharge ...

determines the channel radius as a function of time, where r_0 is the initial radius, W(t) the energy from the impulse generator, and $W_y(t)$ the energy of the shock waves. For a current density of 300 a, the solution of (7) differs from the experimental results by about 33%. There are 2 figures.

ASSOCIATION: Moskovskiy lesotekhnicheskiy institut (Moscow Forestry-engineering Institute)

SUBMITTED: March 24, 1962 (initially)
June 25, 1962 (after revision)

Card 2/2

BONDARENKO, S.T.

Permissible overvoltages with consideration of heating in high-voltage insulated entrances and cables. Elektroenergetika no.7: 31-35 '63. (MIRA 16:9)

BONDARENKO, S.T.

Widening of a gas discharge channel. Zhur. tekh. fiz. 33 no.4:486-488 Ap '63. (MIRA 16:9)

1. Moskovskiy lesotekhnicheskiy institut.
(Electric discharges through gases)

BONDARENKO, S.T.; DOMORATSKIY, V.P.

Some electrophysical properties of petroleum and petroleum products. Izv. vys. ucheb. zav.; neft' i gaz 8 no.6:84-88 '65. (MIRA 18:7)

1. Moskovskiy institut neftkhimicheskoy i gazovoy promyshlennosti im. akademika I.M.Gubkina.

VDOVENKO, N.V.; BONDARENKO, S.V.

Thermodynamics of the sorption of water vapors in modified polygorskite. Ukr.khim.zhur. 30 no.2:160-165 '64. (MIRA 17:4)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

L 04981-67 EWT(m)/EWP(j)/T IJP(c) RM

ACC NR: AP6031518 SOURCE CODE: UR/0073/66/032/009/0979/0982

AUTHOR: Tarasenko, Yu. G.; Bondarenko, S. V.; Gordiyenko, S. A.; Uskov, I. A.; Solomko, V. P.; Vdovenko, N. V.; Ovcharenko, F. D.

ORG: Kiev State University im. T. G. Shevchenko (Kiyevskiy gosudarstvennyy universitet); Institute of General and Inorganic Chemistry, AN UkrSSR (Institut obshchey i neorganicheskoy khimii AN UkrSSR)

TITLE: Hydrophobic fillers in amorphous polymers

SOURCE: Ukrainskiy khimicheskiy zhurnal, v. 32, no. 9, 1966, 979-982

TOPIC TAGS: kaolinite, filler, modified kaolinite, polymethylmethacrylate, kaolin, amorphous polymer

ABSTRACT: Nonmodified kaolinite is an active filler for poly(methyl methacrylate) [PMMA]. A study has been made of the effect of modified kaolinite on the properties of PMMA. Treatment of kaolinite with hydrolyzed polyacrylamide [HPAA] did not change the size of kaolinite particles and had no effect on their aggregation, but considerably affected the surface properties of the modified product. It was shown that introduction of small amounts of HPAA in the surface layer of the filler lowers its capacity to form hydrogen bonds with PMMA macromolecules, while large amounts of HPAA screen the OH surface groups of

Card 1/2 UDC: 678.046+541.183

L 04981-67

ACC NR: AP6031518

the filler and render it incompatible with PMMA. Thus, imparting water repellency (even with simultaneous "organophylization") to a filler does not necessarily increase its activity with respect to polymers containing polar groups. Orig. art. has: 4 figures. [BO]

SUB CODE: 11,07/SUBM DATE: 25Dec64/ ORIG REF: 010/ OTH REF: 002

Card 2/2 bdh

BONDARENKO, T.G.

Some data on the electric conductivity of atmospheric precipitation. Trudy GGO no.134:33-37 '62. (MIRA 15:6)
(Electric conductivity) (Precipitation (Meteorology))

S/054/63/004/001/018/022
B101/B215

AUTHORS: Shul'ts, M. M. Parfenov, A. I., Chen Tieh-yü, Bondarenko, T. G., Mekhryushev, Yu. Ya.

TITLE: Electrode properties of glasses of the oxide system Li_2O - Cs_2O - La_2O_3 - SiO_2

PERIODICAL: Leningrad. Universitet. Vestnik. Seriya fiziki i khimii, no. 1, 1963, 155-160

TEXT: Glasses of the system Li_2O - Cs_2O - La_2O_3 - SiO_2 containing 24, 27, 30, or 33 mole% Li_2O, 0-9 mole% Cs_2O, and 0-9 mole% La_2O_3 were examined as to their electrode properties in order to test their applicability for pH measurements. They were compared with glasses of the systems Li_2O_3 - SiO_2, Li_2O - Cs_2O -SiO_2, and Li_2O - La_2O_3 - SiO_2. The curves E versus pH were plotted at 20 and 95°C in 3 N alkali solution. Results: Increase in Li_2O content from 20 to 30% does not affect the limits of the H^+ function at 20°C, but at 95°C they become

Electrode properties of glasses ...

narrower. Substitution of Cs_2O for part of SiO_2 reduces the alkali deflections and increases the acid deflections of the curve E versus pH, reducing the chemical stability. Addition of La_2O_3 has the opposite effect. The simultaneous addition of Cs_2O and La_2O_3 has an additive effect. The limits of the H^+ function range are shifted in the alkaline region (effect of Cs_2O) as well as in the acid region (effect of La_2O_3). At 20°C, a maximum of the upper limit of the H^+ function range is reached at a content of 3 - 5% Cs_2O and 5-8% La_2O_3 in the glass. At 95°C, however, glasses containing more Cs_2O than La_2O_3 have a maximum H^+ function range. Cs_2O is not be recommended for electrode glasses as it increases the electrode resistance and decreases the chemical stability. 3-6% La_2O_3 is favorable as it increases the stability and stabilizes the electrode potential. There are 5 figures and 1 table.

SUBMITTED: October 1962

Card 2/2

BONDARENKO, T.M.; GORBOV, V.G. [Horbov, V.H.]; KOMAROV, I.Z.; VOYTOVICH, O.S. [Voitovych, O.S.]; KAMINSKIY, F.T. [Kamins'kyi, F.T.]; YAKOVLEVA, Ye.O. [IAkovlieva, IE.O.]; YAKOVLEV, S.B. [IAkovliev, S.B.]; YAVONENKO, O.Ya. [IAvonenko, O.IA.]; VISHCHUN, I.A., red.; ALEKSANDROV, M.O., tekhn.red.

[Our territory; brief guide-reference book] Nash krai; korotkyi putivnyk-dovidnyk. Mykolaiv, Mykolaivs'ke obl.upr.kul'tury, 1958. 94 p. (MIRA 13:2)

1. Nikolayev. Oblastnyi kraieznavchyi muzei.
(Nikolayev Province--Guidebooks)

BONDARENKO, T.S.; RASHEPERIN, V.K.

Methods of estimating the abundance of young gobies in the Sea of Azov. Trudy AzNIIRKH no.6:111-117 '63. (MIRA 17:8)

BONDARENKO, T.I.

Study of cortical spreading depression in a chronic experiment. Naush. dokl. vys. shkoly; biol. nauki no.4:61-64 '64. (MIRA 17:12)

1. Rekomendovana laboratoriyey patofiziologii kafedry fiziologii vysshey nervnoy deyatel'nosti Moskovskogo gosudarstvennogo universiteta im. M.V. Lomonosova.

BOHDARENKO, T.T.

Interrelationships between some regions of the brain following spreading depression. Nauch.dokl.vys.shkoly; biol.nauki no.4:67-70 '65. (MIRA 18:10)

1. Rekomendovana kafedroy fiziologii vysshey nervnoy deyatel'nosti Moskovskogo gosudarstvennogo universiteta im. M.V.Lomonosova.

BONDARENKO, T.V.

BAYANDINA, S.A., BONDARENKO, T.V., YEVDOKIMOVA, A.I., KRECHMER, B.B., VAL'TER, E.M.

Pneumonia

Albomycin therapy in pneumonia in infants. Novosti med. No. 23, 1951.

9. Monthly List of Russian Accessions, Library of Congress, December 1952 [illegible], Uncl.

MARETSKAYA, M.F.;BAYADINA, S.A.;GARELIK, O.S.;GEYSHINA, R.V.;BONDARENKO, T.V.; SHISHOVA, Ye.M.

Pneumonia in infants. Sovet. med. 17 no.7:30-32 July 1953. (CIML 25:1)

1. Of the Clinic for Children's Diseases (Director -- Prof. Yu. F. Dombrovskaya, Corresponding Member AMS USSR) of First Moscow Order of Lenin Medical Institute, Frunzenskiy Rayon Children's Hospital (Head Physician -- F. I. Fefer), and the Children's Division (Head -- R. V. Geyshina) of Polyclinic No. 56.

BONDARENKO, V., krupchatnik

Filters have been replaced by cyclones. Muk.-elev. prom. 28 no.5:31 My '62. (MIRA 15:5)

1. Kirovogradskaya, mel'nitsa No.8.
(Kirovograd--Flour mills)

BONDARENKO, V., inzh.

Joining thin-walled steel pipes using couplings with socket thread. Prom.stroi.i inzh.soor. 4 no.1:54-55 Ja-F '62. (MIRA 15:8)

(Pipe fitting) (Electric wiring)

BONDARENKO, V., serzhant; CHUPRINA, V., starshina sverkhsrochnoy sluzhby; SAMBORSKIY, Ye., yefreytor

We continue our discussion about culture. Starsh.-serzh. no.3:?6 Mr '62. (MIRA 15:4)

(Military discipline)

BONDARENKO, V., Docent

USSR/Radio - Education Engineering, Radio Jul 50

"Problem Which Requires Solution (Discussion of Letter on 'Teaching Radio Engineering in Intermediate Schools')," Docent V. Bondarenko

"Radio" No 7, p 17

Bondarenko claims letter from V. Sterligov and I. Pesin in "Radio," No 6, Jun 50, should include great changes in courses in physics in intermediate schools; many of which have no systematic activities for radio engineering circles, no proper textbooks nor standard method of

164T81

USSR/Radio - Education (Contd) Jul 50

teaching the course on "Electromagnetic Oscillations and Waves." Grozny Order of Red Banner Petroleum Inst has established special courses in radio engineering. This example should be followed.

164T81

BONDARENKO, V.

The capacity of the combine has been doubled. Miss. ind. SSSR 27 no.4:54 '56. (MLRA 9:10)

1. Direktor Orlovskogo myasokombinata.
(Orel--Slaughterhouses)

BONDARENKO, V. (g.Ufa)

Manufacturing panels for petroleum refinery control and automatic instruments. Stroi.pred.neft.prom. 2 no.9:22-23 S '57. (MIRA 12:5)

(Automatic control)

BONDARENKO, V.; LAPIN, A.; SMIRNOV, D.

State Bank's business and people. Den. i kred. 19 no.9:73-80 S '61. (MIRA 14:9)

1. Upravlyayushchiy Kazakhskoy respublikanskoy kontoroy Gosbanka (for Bondarenko). 2. Glavnyy bukhgalter Vologodskoy oblastnoy kontory Gosbanka (for Lapin). 3. Upravlyayushchiy Volokolamskim otdeleniyem Gosbanka (for Smirnov).
(Banks and banking)

BONDARENKO, V.; KALINOVSKAYA, Ye.

Selection and training of personnel should be equal to the new tests. Den.i kred. 15 no.9:44-48 S '57. (MIRA 10:10)

1. Nachal'nik otdela kadrov Ukrainskoy respublikanskoy kontory Gosbanka (for Bondarenko). 2. Nachal'nik sektora kadrov Chuvashskoy respublikanskoy kontory Gosbanka (for Kalinovskaya).
(Banks and banking)

2-58-6-9/16

AUTHOR: Bondarenko, V.

TITLE: National Economy in the Ukrainian SSR (Narodnoye khozyaystvo Ukrainskoy SSR) Achievements of the Soviet Ukraine Over 40 Years (Dostizheniya Sovetskoy Ukrainy za 40 let)

PERIODICAL: Vestnik statistiki, 1958, Nr 6, pp 66-71 (USSR)

ABSTRACT: This is a critical review of the two abovementioned books, which were published in Ukrainian by the statistical administration of the Ukrainian SSR in 1957 (Gosstatizdat, Kiyev). They contain statistical data on the economic development of the Ukraine during the 40 years of Communist control. The critic points out the growing importance of the Ukraine as an agricultural and industrial producer and recommends the books as valuable sources of information.
There are 2 tables.

Card 1/1

BONDARENKO, V.

State Bank's role in developing the Kazakhstan economy. Den. i kred. 21 no.8:25-30 Ag '63. (MIRA 16:9)

1. Upravlyayushchiy Kazakhskoy respublikanskoy kontoroy Gosbanka. (Kazakhstan--Banks and banking) (Kazakhstan--Industries)

BONDARENKO, V., nauchnyy sotrudnik; RODIN, Ye., nauchnyy sotrudnik

Specialized ships for carrying general cargoes and efficiency of their use. Mor. flot 19 no.7:38-39 Jl '59. (MIRA 12:10)

1. Institut kompleksnykh transportnykh problem AN SSSR.
(Freighters)

BONDARENKO, V.

Method of measuring labor productivity in railroad freight and passenger transportation. Biul.nauch.inform.: trud i zar.plata 3 no.9:12-15 '60. (MIRA 13:9)
(Railroads--Labor productivity)

BONDARENKO, V.

Day and night. Grazhd.av 17 no.9:17 S '60. (MIRA 13:9)

1. Nachal'nik aeroporta, Bugul'ma, Tatarskaya ASSR.
(Bugul'ma--Airports)

BONDARENKO, V., inzh.

Selecting basic parameters of multipropeller tugboats [from 57 "International Shipbuilding Progress," November 1959]. Rech.transp. 20 no.6:57 Je '61. (MIRA 14:6)

(Tugboats)

BONDARENKO, V.

Most advantageous diagram for a car-exchange center. Mor.flot 22 no.4:8-12 Ap '62. (MIRA 15:4)

1. Nachal'nik sektora Gosudarstvennogo proyektno-konstruktorskogo i nauchno-issledovatel'skogo instituta morskogo transporta.
(Railroads, Industrial—Freight cars)

BONDARENKO, V.

Use local resources in the turnover of goods. Sov.torg. 36 no.12:10-15 D '52. (MIRA 16:1)

1. Zamestitel' nachal'nika Voronezhskogo oblastnogo upravleniya torgovli.

(Voronezh Province--Manufactures)
(Voronezh Province--Retail trade)

BONDARENKO, V.

Our riches. IUn. nat. no.9:10-11 S '62. (MIRA 16:5)

1. Starshiy agronom kolkhoza imeni XXI s"yezda Kommunisticheskoy partii Sovetskogo Soyuza.
(Berezovka District (Odessa Province)--Agriculture)

BONDARENKO, V.A., starshiy agronom kolkhoza

Effective crop cultivation practices guarantee high yields. Zemledelie 24 no.1:31-35 Ja '62. (MIRA 15:2)
(Field crops) (Tillage)

BONDARENKO, V.A.

Mechanical or hydraulic conveying of bagasse? Sakh.prom. 36 no.4:20-23 Ap '62. (MIRA 15:5)

1. TSentral'nyy nauchno-issledovatel'skiy institut sakharnoy promyshlennosti.
(Sugar manufacture—By-products) (Conveying machinery)

BONDARENKO, V.A.; PETRENKO, L.M., otv. red.

[Equipment for sugar-beet production; sugar beet processing section] Oborudovanie sveklosakharnogo proizvodstva; sveklopererabatyvaiushchee otdelenie. Obzor. Moskva, TSentr. inst. nauchno-tekhn. informatsii pishchevoi promyshl., 1961. 111 p. (MIRA 18:5)

OASHKOVSKIY, F.M.; BONDARENKO, V.A.; STASEVSKIY, P.I.

Manufacture of filtration kieselguhr in the Ukraine. Sakh. prom. 35 no. 5:11-15 My '61. (MIRA 14:5)

1. Ukrgiprosakhar.

(Ukraine—Kieselguhr)

GLOVATSKIY, A.B.; KHAVKIN, V.I.; DOLMATOV, V.A.; ZUYEV, B.P.; BONDARENKO, V A.

Desulfuration of cast iron with soda briquets outside a blast furnace. Metallurg 9 no.9:4-5 S '64.

(MIRA 17:10)

1. Karagandinskiy metallurgicheskiy zavod.

BONDARENKO, Vladimir Antonovich; KIREYEVA, T.R., red.

[Good sense in one's work] Rabochaia smekalka. Vladivostok, Primorskoe knizhnoe izd-vo, 1963. 22 p.
(MIRA 18:3)

...LOBIS, M. K.; BONDARENKO V. A.; PROKOF'YEV, P. T.; SIMONOVA, L. I.

"The Spectrum of Electrons of Internal Conversion of In^{116} Following Capture of Thermal Neutrons."

report submitted for All-Union Conf on Nuclear Spectroscopy, Tbilisi, 14-22 Feb 64.

IF AS LatvSSR (Inst Physics, AS LatvSSR)

ACCESSION NR: AP4024048 S/0048/64/028/002/0262/0267

AUTHOR: Balodis, M.K.; Bondarenko, V.A.; Prokof'yev, P.T.

TITLE: Beta spectrograph for investigation of internal conversion electrons emitted incident to thermal neutron capture /Report, Fourteenth Annual Conference on Nuclear Spectroscopy held in Tbilisi 14 to 22 Feb. 1964/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v.28, no.2, 1964, 262-267

TOPIC TAGS: β-spectrograph, conversion electron spectrograph, thermal neutron capture, cadmium 113

ABSTRACT: For purposes of investigation of the γ-rays emitted incident to thermal neutron capture by observation of the internal conversion electrons, the authors developed a set-up assembled about the β-spectrograph with a uniform transverse magnetic field described earlier (M.K.Balodis, I.L.Osis and P.T.Prokof'yev, Radioaktivnye izlucheniya i metody* ikh issledovaniya. Tr.In-ta fiziki AN LatvSSR 135,1961). The experimental arrangement is diagramed in the figure (Enclosure). The β-spectrograph consists of a permanent magnet, a vacuum chamber with diaphragms, a photographic cassette 70 cm long, and a magnetic shield which insures focusing of a broad

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ACCESSION NR: AP4024048

electron beam in the uniform transverse magnetic field. The components and design characteristics of the spectrograph are discussed at some length. For test and calibration purposes there were recorded the conversion electrons from the $Cd^{113}(n,\gamma)-Cd^{114}$ reaction and the results are presented in the form of a figure and a table. The set-up is suitable for investigation of isotopes with relatively small capture cross sections, in view of the fact that the target is located at the reactor core.
"The authors express their gratitude to A.M.Demidov, member of the imeni I.V.Kurchatove Institute of Atomic Energy AN SSSR, for useful consultations in discussing the design of the system of collimators and location of the target and to members of the Institute of Physics of the Latvian SSR Academy of Sciences M.R.Beytinyu, L.Ya. Mazure, L.I.Simonova and V.A.Zalite for assistance in adjusting the spectrograph."
Orig.art.has: 10 formulas, 4 figures and 1 table.

ASSOCIATION: Institut fiziki Akademiy nauk LatvSSR (Institute of Physics, Academy of Sciences, Latvian SSR)

SUBMITTED: 00Jun63 DATE ACQ: 08Apr64. ENCL: 01

SUB CODE: NS, SD NR REF SOV: 009 OTHER: 005

Card 2/3

BONDARENKO, V.A.; PROKOF'YEV, P.T.; SIMONOVA, L.I.

Analysis of the scheme of levels in Dy^{165} based on the spectrum of conversion electrons emitted in the capture of thermal neutrons. Izv. AN SSSR. Ser. fiz. 29 no.12:2168-2172 D '65.

(MIRA 19:1)

L 45191-65 EWT(m)/EWP(t)/EWP(b)/EWA(h) IJP(c) JD

ACCESSION NR: AP5009828 UR/0367/65/001/002/0250/0251

14
15
B

AUTHORS: Balodis, M. K.; Bonderenko, V. A.; Prokof'yev, P. T.; Simonova, L. I.

TITLE: Spectrum of internal-conversion electrons produced upon capture of thermal neutrons by indium 19 21

SOURCE: Yadernaya fizika, v. 1, no. 2, 1965, 250-251

TOPIC TAGS: indium, conversion electron spectrum, thermal neutron capture, beta spectrometry, gamma transition, internal conversion coefficient

ABSTRACT: The spectrum of the internal-conversion electrons produced upon capture of thermal neutrons by indium was plotted in the 40--600 keV energy range with a β spectrograph of 0.4--0.5% resolution, described by the authors elsewhere (Izv. AN SSSR ser. fiz. v. 28, 262, 1965). The registration of the spectrum on a photographic

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L 45191-65

ACCESSION NR: AP5009828

plate with R-50 emulsion took 1.5 hours at a reactor power of 1500 kW (5×10^{12} neut/sec-cm^2). Conversion lines were observed, corresponding to gamma transitions at 60.7, 85.5, 96.1, 115.0, 126.5, 141.2, 155.6, 162.3, 171.0, 173.4, 186.2, 203.4, 234.8, 271.5, 284, 289, 335, and 384 keV. The internal conversion coefficients were estimated for some of the transitions. The ratio of the cross section for isomer production was estimated from the intensity ratio of the 138.5 and 415 keV conversion lines in Sn^{116} and found to equal 0.8 ± 0.4. Orig. art. has: 1 table.

ASSOCIATION: Institut fiziki Akademii nauk Latviyskoy SSR (Institute of Physics, Academy of Sciences, Latvian SSR)

SUBMITTED: 24Jul64 ENCL: 00 SUB CODE: NP

NR REF SOV: 002 OTHER: 007

Card 2/2

L 04218-67 EWT(1) IJP(c)
ACC NR: AR6015877 (N) SOURCE CODE: UR/0275/65/000/012/V009/V010

34
B

AUTHOR: Belousov, N. A.; Bondarenko, V. A.; Shlenskiy, Ye. M.

TITLE: Ultrasonic generators of the UZG series 25 10

SOURCE: Ref. zh. Elektronika i yeye primeneniye, Abs. 12V62

REF SOURCE: Tr. N.-i. tekhnol. in-t, vyp. 8, ch. 1, 1964, 5-15

TOPIC TAGS: ultrasonic emitter, ultrasonic equipment, electric generator unit

ABSTRACT: Powerful UZ generators 10 produced at the present time are described (of types UZG-10M, UZG-6, and UZG-2.5). After modernization, they were renamed UZG-10U, UZG-6M, and UZG-2.5M. In the development and modernization of generators of the UZG series, a number of common solutions have been used: application of circuits with self-excitation, power supply from anode circuits, from regulated rectifiers, stabilization of the power supply of the heating circuits, and application of regulated field rectifiers. Technical data of six generators of the UZG series are given, all operating in the range from 18 to 22 kc, and also simplified electrical circuits of the modernized generators. As a result of modernization, an increase in capacity produced and in the efficiency of the generators has been achieved. [Translation of abstract] S. B.

SUB CODE: 09,13
Card 1/1 pla

UDC: 534.232-8

L 34978-66

ACC NR: AP6017587 SOURCE CODE: UR/0367/66/003/002/0193/0198

AUTHOR: Bondarenko, V. A.; Prokof'yev, P. T.; Simonova, L. I.

ORG: Institute of Physics, Academy of Sciences, Latvian SSR (Institut fiziki Akademii nauk Latviyskoy SSR)

TITLE: Spectra of internal conversion electrons in capture of thermal neutrons by gold

SOURCE: Yadernaya fizika, v. 3, no. 2, 1966, 193-198

TOPIC TAGS: gold, conversion electron spectrum, neutron capture, Beta spectroscopy, Gamma transition

ABSTRACT: The spectrum of conversion electrons emitted when thermal neutrons are captured by Au^{197} nuclei was investigated with a β spectrograph, described by the authors earlier (Izv. AN SSSR, seriya fiz. v. 28, 262, 1964), with a resolution 0.15 - 0.3% in the energy interval 30 - 500 kev. The target was a gold foil 0.4 mg/cm^2 thick. Most of the spectral lines were identified with appreciable reliability by comparing the intensities of the γ rays and the conversion-electron lines. The reference lines chosen were the electronic lines ascribed to the strong γ transitions with 55.19, 168.26, 192.42, 214.89, 247.42, and 261.26 kev energy. Some difficulties arose in the identification of certain lines, making it necessary to check on the possible presence of lines from other isotopes. The results have shown that most strong transitions in the energy interval 55 - 300 kev have a multipolarity M1. A

Card 1/2

ACC NR: AP6017587

table listing the conversion-electron and γ-transition energies, conversion coefficients, and multipole transitions in Au^{198} is presented. The low-lying excited levels of Au^{198} are discussed and according to the present data the first-excited level (55.19 kev above the ground state) is de-excited by a mixed type transition (M1/E2 = 15 ± 3), the total transition intensity estimated at ~70%. The next three levels (192.42, 235.95, and 261.26 kev) have likewise transition intensities which appear to be excessively high (~120%). Orig. art. has: 1 table.

SUB CODE: 20/ SUBM DATE: 07Jun65/ ORIG REF: 004/ OTH REF: 001

Card 2/2 JS.

L 45827-66 EWT(l) IJF(c)

ACC NR: AR6015977 SOURCE CODE: UR/0275/65/000/011/V010/V010 48 B

AUTHOR: Belousov, N. A.; Bondarenko, V. A.; Volodin, V. P.; Shlenskiy, Ye. M.

TITLE: Methods for improving the operational characteristics of ultrasonic generators 15

SOURCE: Ref. zh. Elektronika i yeye primeneniye, Abs. 11V66

REF SOURCE: Tr. N.-i. tekhnol. in-t, vyp. 8, 1964, 23-28

TOPIC TAGS: ultrasonic vibration emitter, AFC, semiconductor diode

ABSTRACT: The paper is a report on modernization of ultrasonic generators in the UZG series. The efficiency of these generators is improved by using semiconductor diodes in plate rectifier circuits. These diodes have a longer service life than gas rectifiers. Losses in the rf circuits may be considerably reduced by using transposed windings and ferrite cores. The most promising method for power regulation uses a power transformer with a stepwise voltage control. The use of this type of transformer in a system with continuous regulation in the grid circuit gives a continuous power control within the necessary limits without any considerable change in the efficiency of the UZG generator. A report is given on development of a generator circuit with AFC tuned to the mechanical resonance frequency of the transducer. UZG systems are considered from the standpoint of improving their operational characteristics. 4 illustrations. A. Ch. [Translation of abstract]

SUB CODE: 13, 09

UDC: 534.232-8

Card 1/1 40

L 00842-67 EWT(1) IJP(c)

ACC NR: AR6011093 SOURCE CODE: UR/0272/65/000/011/0072/0072

AUTHORS: Belousov, N. A.; Bondarenko, V. A.; Volodin, V. P.; Shlenskiy, Ye. M. 48 B

TITLE: Methods of increasing the operational characteristics of ultrasonic generators

SOURCE: Ref. zh. Metrologiya i izmeritel'naya tekhnika, Abs. 11.32.608 25

REF SOURCE: Tr. N.-i, tekhnol. in-t, vyp. 6, 1964, 23-28

TOPIC TAGS: ultrasonic frequency, high frequency, electric transformer, ferrite, semiconductor rectifier, electron tube grid, ultrasonic generator/ UZG ultrasonic generator

ABSTRACT: A modernization of the ultrasonic vacuum-tube generators of the UZG series is reported. The efficiency of the ultrasonic generators is increased by using semiconductor diodes in the circuits of the plate rectifiers. Semiconductor diodes have a longer life than ion rectifiers. Losses in the high-frequency circuits can be considerably reduced by using transformer winding and ferrite cores. For the regulation of power, the most promising is a regulation circuit with the use of a power transformer with step regulation of voltage. The use of such a transformer in conjunction with smooth regulation in the grid circuit permits smooth regulation of power within the required limits without a substantial change in the efficiency of the ultrasonic generators. Circuits are given which permit reduction of plate

Card 1/2

UDC: 389:534-8.232.004.12

L 00842-67

ACC NR: AR6014093

losses and a corresponding increase in efficiency. The development of a circuit with automatic tuning of the frequency of the generator to the frequency of mechanical resonance of the converter is reported. Ultrasonic-generator systems are examined with the aim of improving their operational characteristics. 4 illustrations.
[Translation of abstract]

SUB CODE: 09, 14

Card 2/2 pb

ACC NR: AP6032532 SOURCE CODE: UR/0413/66/000/017/0132/0132

INVENTOR: Stamov-Vitkovskiy, A. V.; Ginin, V. N.; Mamet, B. T.; Bondarenko, V. A.

ORG: none

TITLE: Device for ultrasonic welding. Class 49, No. 185673

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 17, 1966, 132

TOPIC TAGS: ultrasonic welding, welding ~~device~~ EQUIPMENT

ABSTRACT: This Author Certificate introduces an ultrasonic welding device consisting of vibrators and a transverse oscillation transformer connected with the working tool. To increase the oscillation amplitude of the working tool, the transformer is provided with longitudinal slots and the working tool forms one piece with the transformer (see Fig. 1). Orig. art. has: 1 figure.

Card 1/2 UDC: 621.791.16.03

ACC NR: AP6032532

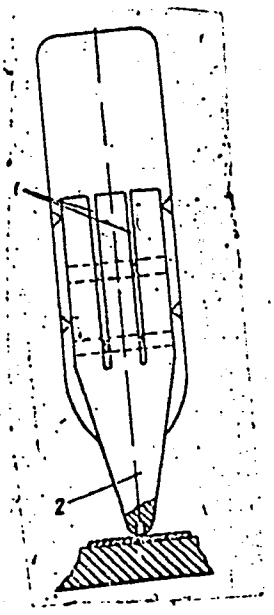

Fig. 1. Ultrasonic welding device

1 - Longitudinal slots;
2 - working tool.

SUB CODE: 13/ SUBM DATE: 11May65/

Card 2/2

BONDARENKO, V.D.; CUS'KOV, Yu.K.; PASHCHENKO, V.P.

Determining the thermionic constants of metallic film cathodes of converters. Izv. AN SSSR. Ser. fiz. 28 no.9:1545-1547 S '64. (MIRA 17:10)

POLYAN'KO, Varvara Fedorovna

[Control of pests and diseases of decorative and fruit plantings; calendar of operations] Borotba z shkidnykamy i khvorobamy dekoratyvnykh i plodovykh nasadzhen (kalendar zakhodov) Kyiv, "Radianska shkola", 1956. 61 p. (MLRA 10:5)

(Fruit--Diseases and pests)

(Plants, Ornamental--Diseases and pests)

BONDARENKO, Viktor Grigor'yevich; GRIGOROVICH, A.T., red.; SERADZSKAYA, P.G., tekhn. red.

[Don't expect any favors from nature] Ne zhdat' milostei ot prirody. Voronezh, Voronezhskoe knizhnoe izd-vo, 1960. 27 p. (MIRA 14:10)

1. Sekretar' Povorinskogo rayonnogo komiteta Kommunisticheskoy partii Sovetskogo Soyuza (for Bondarenko).
(Agriculture)