

Films on Welding

SOV/135-59-8-22/24

raised, there is no longer the deafening noise of the chisel, and material and electric energy is saved. The film "Arc Welding of Metals" is in preparation. Also planned are films on welding of pipelines, about build-up welding, and about the production of cylindrical containers by rolling.

Card 2/2

S/118/G1/000/005/003/006
D203/D306

AUTHOR: Zhivotinskiy, L.A., Engineer

TITLE: Auxiliary welding equipment for automating complex welding production

PERIODICAL: Mekhanizatsiya i avtomatizatsiya proizvodstva, no. 5, 1961, 19-23

TEXT: The time needed for positioning the parts to be welded, the cleaning of the welded seams etc. takes in some plants 60 to 70% of the total welding time and thus constitutes a major production problem. In automatic welding, considerable time is also lost due to transportation. Auxiliary equipment has been developed such as manipulators - positioners, stands on rollers for the edging machines, conveyors, special trucks, quick acting load grasping cranes etc. In the Uzlovskiy mashinostroitel'nyy zavod (Uzlov Machine-building Plant) when designing the welding production lines, 80% of the auxiliary equipment selected was of the universal type. For assembling and

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S/118/61/000/005/003/006
D203/D306

Auxiliary welding equipment...

welding automobile chassis frames, universal manipulators of 5 ton capacity are used. In the Ural'skiy zavod (Ural Plant) for chemical equipment the use of a manipulator for welding the bottoms of tanks has simplified the operations considerably. The records of the Dneprodzerzhinskiy vagonostroitel'nyy zavod (Dneprodzerzhinsk Car-Construction Plant) show that using a ring edging machine has cut the labor required in welding the side edge of an undercarriage by 30%. In the "Rostsel'mash" plant, the use of special edging equipment for welding the frame of the CK-3 combine (SK-3) resulted in shortening the time (0.377 hour per frame). In the Mogilevskiy mashinostroitel'nyy zavod (Mogilev Machine-building Plant) the introduction of auxiliary tools has cut the time loss by 35%. Research carried out by the Vsesoyuznyy proyektno-tekhnologicheskii institut tyazhelogo mashinostroyeniya (All-Union Design and Planning Technological Institute for Heavy Machine-Construction) has shown that the level of mechanization in welding production is clearly inadequate. Even in such large plants as Uralsmashzavod and the one at Novokramatorsk, the auxiliary equipment is limited. One of

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Auxiliary welding equipment...

S/118/61/000/005/003/006
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the reasons affecting welding production is that hitherto the auxiliary equipment is not yet standardized. The All-Union Design and Planning Institute has worked out 10 new types of equipment in the last few years. These could be applied to all types of parts being welded with weights from 100 to 10,000 Kg and of dimensions of 5000 x 5000 x 1500 mm. Various types of equipment for hand welding have also been designed for parts weighing up to 5 tons and for tank welding. A universal manipulator of the type YCM-500 (USM-500) is used for parts up to 500 kg. A universal edging machine-trolley has a useful capacity up to 12 tons. It has two wings which are normally in a horizontal position, but could be raised to 90° by the hydraulic drive. When one wing is raised, the other is lowered. This welding equipment could be rolled underneath the part to be welded and the edging operation done in this position. It is expected that such universal trolleys will be built for hoists of 50, 80 tons and more. The organization of production of auxiliary equipment in 8 plants with an outlay of 3.7 million roubles in 1961 and up to 12 million roubles in 1965 is envisaged. In 1961 the Gorlovskiy

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Auxiliary welding equipment...

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zavod (Gorlov Plant) of the Stalinskiy sovnarkhoz (Stalin-Sovnarkhoz) will manufacture the first series of welding manipulators of 5 ton capacity. The "Lesmash" Plant of the Khar'kovskiy sovnarkhoz (Khar'kov Sovnarkhoz) shall manufacture manipulators of 1200 Kg capacity. The Mekhanicheskiy zavod (Mechanical Plant) No. 7 of the L'vovskiy sovnarkhoz (L'vov Sovnarkhoz) will manufacture such items as roller turners and machines for loading boxes. There are 7 figures. ✓

Card 4/4

GITLEVICH, A.D.; ZHIVOTINSKIY, L.A.; ZHMAKIN, D.F.; FAL'KEVICH,
A.S., kand.tekhn. nauk, retsensent; CHIKUNOV, A.I., inzh.,
retsensent; TYURIN, V.F., inzh., red.; PETUKHOVA, G.N.,
red.izd-vz; MODEL', B.I., tekhn.red.

[Work standards based on technical data for welding engineer-
ing processes] Tekhnicheskoe normirovanie tekhnologicheskikh
prozessov v svarochnykh tsakhakh. [By] A.D.Gitlevich i dr.
Moskva, Mashgiz, 1962. 170 p. (MIRA 16:3)
(Welding--Production standards)

YEMEL'YANOV, Leonid Vasil'yevich; ZHIVOTINSKIY, Lev Abramovich;
GITLEVICH, Arlen Davidovich; TYURIN, V.F., nauchnyy red.;
IONOV, V.N., red.; DORODNOVA, L.A., tekhn. red.

[Auxiliary equipment for welding; an album] Vspomogatel'noe oborudovanie dlia svarki; al'bom. Moskva, Proftekhizdat, 1962. 123p.
(MIRA 16:1)

(Welding--Equipment and supplies)

ZHIVOTINSKIY, L.A., inzh.

Album of the Exhibition of Achievements of the National
Economy in welding techniques. Svar. proizv. no.7:45
Jl '63. (MIRA 17:2)

PROCEDURES AND PROPERTIES INDEX

1

CA

Two types of laboratory pumps for mercury. P. ZATVITSKIY, Ufa, Kars. Zhur. 6, No. 5-6, Sci. Part, 241-4 (1931).—Two new types of app. for pumping Hg were constructed of glass and rubber and tried out successfully in Zh.'s lab. The action of one is based on difference in d. of water and Hg, which gives rise to a stream of Hg drops and water, the latter entering the app. from the general system under pressure and being unable to overcome the pressure of a column of Hg in a lower arm. In the 2nd pump drops of Hg are elevated in a tube and carried by water suction. J. G. TOULIN

METALLURGICAL LITERATURE CLASSIFICATION

E-27.02.1.1.1.1

PROCESSES AND PROPERTIES INDEX

CA

The electrochemical production of sodium hypochlorite. II. P. H. ZHIVOTINSKIĬ, A. P. MAASOVITS AND A. S. FOKIN. *Ukrain. Khim. Zhur. S. Wsm. Tech. Teil*, 205-11(1931).—The results obtained by Rabinovich and Fokin (C. A. 25, 644) have been utilized to prep. Na_2SO_4 on a semi-factory scale. The current output is 65-70%, while a concd. soln. of Na_2SO_4 is obtained. Changes of the conditions of the electrolysis such as c. d., stirring and temp. did not greatly affect the process. The results favor the

prep. of Na_2SO_4 on a factory scale. III. P. B. ZHIVOTINSKIĬ. *Ibid* 213-19.—The exper. results indicate that the Solvay cell can be substituted for the Castner cell and that a concd. soln. of Na_2SO_4 is obtained with satisfactory current output. With the Solvay cell the process requires less attention.

ASA-SEA METALLURGICAL LITERATURE CLASSIFICATION

11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

PROCESSES AND PROPERTIES INDEX

2

*Catalytic Decomposition of Sodium Amalgam.—*U. P. B. Zhiroviniky and A. P. Maabovets (Ukrainski Khimichnyi Zhurnal (J. Chim. Ukraine), 1933, 2, (3/4), 366-371).—(In Ukrainian, with German summary.)* Fatigue of the ferro-silicon catalyst during decomposition of sodium amalgam is attributed to covering of its surface by a layer of iron-mercury emulsion, which prevents contact with the amalgam. The catalyst can be regenerated, however, by shaking in air, or, preferably, in hydrogen. An apparatus for the continuous revival of spent catalyst is described; vigorous agitation of the amalgam by rotation of the vessel appreciably accelerates the decomposition. Increase in the silicon content of the catalyst from 13.8 to 63% also slightly accelerates the reaction.—*M. Z.*

METALLURGICAL LITERATURE CLASSIFICATION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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2

***Catalytic Decomposition of Sodium Amalgam.—III.** A. P. Maabovets and I. B. Zhirotskiy (*Ukrainian Chemical Journal (J. Chim. Ukraine)*, 1933, 8, (3/4), 373-380).—(In Ukrainian, with German summary.) In the continuous catalytic decomposition of sodium amalgam in a revolving drum the

ferro-silicon catalyst shows no sign of fatigue after prolonged use, and the rate of decomposition is considerably accelerated, being about double that in the apparatus described in the preceding abstract. In addition the mercury consumption is reduced, and the iron formed, which is frequently in the form of small nuggets, can be removed continuously and quantitatively by means of an electromagnet, which is of considerable importance in preventing explosions.—M. Z.

610-354 METALLURGICAL LITERATURE CLASSIFICATION

BOOKS	PERIODICALS	DISSERTATIONS	REPORTS	OTHER
1	2	3	4	5

CP

Electrolytic production of manganese. II P. D. Zhirovskii, S. A. Zaretskii, I. A. Bogdanova and R. L. Livshits. *J. Applied Chem. (U. S. S. R.)* 12, 635-41 (in French, 641)(1939); cf. *C. A.* 33, 6723. —Out of all metals present in the Mn ore, only Na, K, Ca and Mg do not affect the electrolytic pptn. of Mn. Fe, Al, Ni, Cu, P and As should be sepd. from the Mn salts before electrodeposition of Mn. For the prepn. of an electrolyte, pyrolusite was dissolved with HCl or H₂SO₄. Fe⁺⁺⁺ present in the soln. was oxidised to Fe⁺⁺⁺⁺; Fe⁺⁺⁺⁺ and Al⁺⁺⁺ were pptd. with NH₄OH or MnCO₃ as hydroxides, P as FePO₄; As was pptd. together with Fe(OH)₃ (cf. Biltz, *Ber.* 37, III, 3124-50(1904)) and Ni and Cu were pptd. by boiling the soln. with Fe-Mn in alk. soln. The current efficiency for pptn. of Mn from the purified electrolyte was about 85%.
A. A. Podgorny ...

ASAP 514 METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND REPORT PROCESSES AND PROPERTIES ONLY

4

Electrolytic production of manganese. I. P. H. Zhiptinskii, S. A. Zaretaki, I. A. Bogdanova and P. E. Livshits. *J. Applied Chem. (U. S. S. R.)* 12, 2018 (in French, 2M)(1939).—The following conditions are recommended for the prepn. of Mn: (1) $MnCl_2 \cdot 4H_2O$ 150, NH_4Cl 100 g./l., HCl 0.03 mol./l., pH = 1.2-1.3; at 10-25°, c. d. 1000 amp./sq. m. at the plates and 2500 amp./sq. m. at the rods, Fe, Cu or Al cathode and graphite or Pt anode (alundum or asbestos-diaphragm); (2) $MnSO_4 \cdot 8H_2O$, $(NH_4)_2SO_4$ 150 and SO_2 0.05-0.4 g./l., pH = 4-7, at 20-30°, at c. d. 200-750 amp./sq. m., Fe as the cathode and Pb as anode (linen or ceramic diaphragm), 5 wooden cells. The current yields of Mn were 80 and 60% resp.

A. A. Polgorny

ASAC-SLA METALLURGICAL LITERATURE CLASSIFICATION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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FEDOT'YEV, N.P., prof.; ALABYSHEV, A.F.; ROTINYAN, A.L.; VYACHESLAVOV,
P.M.; ZHIVOTINSKIY, P.B.; GAL'NBK, A.A.; MORGACHEVSKIY, A.G.,
red.; ERLIKH, Ye.Ya., tekhn. red. -

[Applied electrochemistry] Prikladnaia elektrokimiia. Lenin-
grad, Goskhimizdat, 1962. 638 p. (MIRA 15:12)
(Electrochemistry)

ROTINYAN, A.L.; KHEYFETS, V.L.; ZHIVOTINSKIY, P.B.

Contribution to the theory of electrolysis of alkali metal chlorides
in baths with a filtering diaphragm. Zhur. prikl. khim. 38 no.1:78-
83 Ja '65. (MIRA 18:3)

ZHIVOTKEVICH, V.

Let's fully carry out every resolution. Sov.profsoiuzy 7
no.22:33-34 N '59. (MIRA 12:12)

1. Chlen prezidiuma postoyanno deystvuyushchego proizvod-
stvennogo soveshchaniya Stalingradskogo rechnogo porta.
(Stalingrad--Harbor) (Works councils)

ZHIVOTKEVICH, Y.I.

Adopt economic accountability more extensively in all phases of port activity. Rech. trans. 18 no.8:45-46 Ag '59. (MIRA 12:12)

1. Nachal'nik Volgo-Donskogo uchastka Stalingradskogo porta.
(Inland water transportation--Accounting)

ZHIYOTKO, B.I., kandidat tekhnicheskikh nauk.

Separating stones from root crops at the time of washing.
Sel'khoz mashina no.8:23 Ag '56.

(MLRA 9:10)

(Root crops) (Farm equipment)

TRUBILKO, N.P.; GABYSHEV, M.F., professor, redaktor; ZHIVOTKO, B.I., kandidat
tekhnicheskikh nauk; redaktor; ALEKSANDROVICH, Kh., tekhnicheskii
redaktor

[Economic efficacy of mechanizing work on collective farm stock
sections] Ekonomicheskaya effektivnost' mekhanizatsii truda na
zhivotnovodcheskikh fermakh kolkhozov. Minsk, Izd-vo Akad.nauk
Belorusskoi SSR, 1957. 110 p. (MLRA 10:9)
(Stock and stockbreeding) (Farm mechanization)

ZHIVOTKO, Boris Ivanovich; RABINOVICH, A., red.; TRUKHANOVA, A., tekhn.
red.

[Machines and devices for ensiling corn] Mashiny i prisposobleniia
dlia silosovaniia kukuruzy. Minsk, Gos.izd-vo BSSR. Red.sel'khoz.
lit-ry, 1958. 40 p. (MIRA 13:4)
(Corn (Maize)) (Ensilago)

PIUNOVSKIY, I.I., kand. tekhn. nauk; ZHIVOTKO, B.I., kand. tekhn. nauk; RUKTESHEL', S.V., kand. tekhn. nauk; SHTOMPEL', B.N., kand. tekhn. nauk; BUTVILOVSKIY, F.A., inzh.; KORZHENEVSKAYA, R.A., inzh.; LOGVINOVICH, I.P., inzh.; UTEVSKAYA, L.I., kand. tekhn. nauk; RUNTSO, A.A., kand. tekhn. nauk; NAGORSKIY, I.S., kand. tekhn. nauk; TERPILOVSKIY, K.F., kand. tekhn. nauk; LOSEV, V.I., kand. tekhn. nauk; YAROSHEVICH, A.A., kand. tekhn. nauk; KATSYGIN, V.V., kand. tekhn.nauk, red.; BOROVIKOVA, R., red.

[Problems of the technology of mechanized agricultural production] Voprosy tekhnologii mekhanizirovannogo sel'skokhoziaistvennogo proizvodstva. Minsk, Izd-vo "Urozhai." Pt.2. 1964. 336 p.
(MIRA 17:7)

1. Tsentral'nyy nauchno-issledovatel'skiy institut mekhanizatsii i elektrifikatsii sel'skogo khozyaystva nechernozemnoy zony SSSR.

ZHIVOTKOY, A. inzh.

Trenchless stonecutting machine designed by P.S. Kuziachkin.
Stroi. mat. 4 no.9:11-12 S '58. (MIRA 11:10)
(Quarries and quarrying--Equipment and supplies)

ZHIVOTKOV, Kh.

25898. ZHIVOTKOV, Kh. Diferentsial'naya diagnostika vidov polovoy okhoty kobyly. Veterinariya, 1949, No. 8, S. 44-47.

So. Letopis' Zhurnal'nykh Statey, Vol. 34, Moskva, 1949

ZHIVOTKOV, Kh.

"Differential diagnosis of the types of sexual estrus in mares."

SO: Vet. 26 (8), 1949, p 44

1. ZHIVOTKOV, Kh. I.
2. USSR (600)
3. Horse Breeding
4. Problem of winter and early spring breeding of mares.
Konevodstvo No. 10 - 1952
12.

9. Monthly List of Russian Acquisitions, Library of Congress, February. Unclassified.
1953.

ZHIVOTKOV, Kh. (Laureate of the Stalin Prize, Merited Vet. of the RSFSR)

"Abortions of mares in early stage of pregnancy."

SO: Veterinariia 29 (11), 1952, p. 55

1. ZHIVOTKOV, Kh.
2. USSR (600)
4. Horses - Diseases
7. Abortion in mares during early stages of foaling. Veterinariia 29 no. 11, 1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1953, Uncl.

1. ZHIVOTKOV, Kh.
2. USSR (600)
4. Abortion in Animals
7. Abortion in mares during early stages of foaling, Veterinaria 29, No. 11, 1952.

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

ZHIVOTKOV, Kh.I., zasluzhenny veterinar'nyy vrach RSFSR

Method for the preparation of teaser bulls. Veterinariia 41
no.3:79-80 Mr '65, (MIRA 18:4)

ZHIVOTKOV, S.G.; YAMPOL'SKIY, K.I., inzh.

Practice of using portable gas welding units in the repair of
communication cables. Vest. svyazi 22 no.5:22-23 My '62.

(MIRA 15:5)

1. Nachal'nik Upravleniya kabel'noy i radioreleynoy magistrali,
g. Kuybyshev (for Zhivotkov).

(Electric cables--Welding)

ZHIVOTKOV, S.G.; NOSOVA, A.A.

Experience in the introduction of business accounting in the technical administrations of long-distance cable and radio relay lines. Vest. sviazi 24 no.4:30-31 Ap '64. (MIRA 17:9)

1. Nachal'nik Upravleniya tekhnicheskoy ekspluatatsii kabel'nykh i radioreleynykh magistralei (for Zhivotkov). 2. Starshiy inzhener-ekonomist Upravleniya tekhnicheskoy ekspluatatsii kabel'nykh i radioreleynykh magistralei (for Nosova).

SHASHIN, Petr Petrovich, inzh.-meliorator; ZHIVOTKOV, V., red.; IVANOV, N.,
tekhn. red.

[Improvement of meadows is an urgent task of collective and
state farms] Uluchshenie lugov - neotlozhnoe delo kolkhozov i
sovkhozov. Kaluga, Kaluzhskoe knizhnoe izd-vo, 1959. 17 p.
(MIRA 15:1)

1. Kaluzhskoye oblastnoye upravleniye sel'skogo khozyaystva
(for Shashin).

(Pastures and meadows)

SHER, I.D., prof.; ZHIVOTKOVA, L.F., kand. ekon.nauk; TAL'MINA, P.V.,
kand. ekon.nauk; BUNICH, P.G., prof.; BASMANOV, V.A.;
ROGOVTSEV, S.Ye.; KONDRAT'YEVA, A., red.; TELEGINA, T.,
tekhn. red.

[Finance of industry and construction] Finansy promyshlennosti
i stroitel'stva. [By] I.D.Sher i dr. Moskva, Gosfinizdat,
1963. 288 p. (MIRA 16;11)

(Finance)

BABAYEV, V.I., inzh.; GRANOVSKAYA, R.M., inzh.; ZHIVOTKOVA, L.V.;
BONDARENKO, I.S.

Removal of suspended matter from neutralized wastes in the
manufacture of synthetic fatty acids. Masl.-shir. prom. 29
no.3:32-34 Mr '63. (MIRA 16:4)

1. Shebekinskiy kombinat sinteticheskikh zhirnykh kislot i
zhirnykh spirtov.
(Acids, Fatty) (Industrial wastes)

ZHIVOTOK, I. I.

Emulsion for lubricating molds. Bet. 1 zhel.-bet. 8 no.5:243 My
(MIRA 15:6)

1. Glavnyy inzhener Zavoda zhelezobetonnykh konstruktsey No.5
Upravleniya Promstroymaterialov Khar'kovskogo sovnarkhoza.
(Lubrication and lubricants)

DAVIDOV, A.A., inzhener; SHUKLER, B.I., inzhener; ZHIVOTOV, A.P., inzhener;
RAKOV, K.A., kandidat tekhnicheskikh nauk.

Dynamic characteristics of once-through-type boilers.

Teploenergetika 3 no.11:19-25 N '56.

(MIRA 9:12)

1. Moskovskoye otdeleniye Kotloturbinnogo instituta i Vsesoyuznyy
tepol'tekhnicheskiy institut imeni Dzerzhinskogo.
(Boilers)

"APPROVED FOR RELEASE: 07/19/2001

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ZHIVOTOVA, G. P.

Basal metabolism in hypertension and effect of protective inhibition therapy on its changes. Klin. med., Moskva 31 no.5:60-66 May 1953.

(CLML 25:1)

1. Of the Faculty Therapeutic Clinic (Director -- Prof. L. A. Varshamov), Saratov Medical Institute.

ZHIVOTOVA, Galina Petrovna

Gas Exchanges of Patients of Hypertonical Diseases and Their
Changes under the Influence of Therapeutic (snom)

Dissertation for candidate of a Medical Science degree. Chair of the
Department of Therapeutic (leCHFaka) (head, Prof. L.A. Varshamov) Saratov
Medical Institute, 1956

USSR/General and Systematic Zoology. Insects. Systematics and Faunistics. P

Abs Jour : Ref Zhur - Biol., No 3, 1959, No 11521

Author : Zhiyotovskaya, A.A.

Inst : Uzhgorod Univeristy

Title : Concerning the Fauna of Halticinae (Chrysomelidae) in Zakarpatskaya Oblast'.

Orig Pub : Dokl. i soobshch. Uzhgorodsk. un-t, 1957, No 1, 51-52

Abstract : An inventory of 81 flea species (from 20 genera), indigenous to Transcarpathia; 7 of these species are new for the oblast'.

Card : 1/1

- 8 -

15-1957-3-2800
Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 3,
p 40 (USSR)

AUTHOR: Zhivotovskaya, A.I.

TITLE: The "Brown" Clays of Southern Primor'ye and the Tertiary-
Quaternary Boundary (O "burykh" glinakh yuzhnogo Primor'-
ya i tretichno-chetvertichnoy granitse)

PERIODICAL: Materialy Vses. n-i. geol. in-ta, 1956, Nr 1, pp 74-88

ABSTRACT: "Brown" clays have been identified as weathering crusts
on basalts (Ussuri river basin), gneisses, and Archean
schists (Kabarga river basin). A gradual transition is
observed from the stage of mechanical disintegration to
the clay stage. The rocks of the crust of weathering
are affected by their structure, inasmuch as they dis-
integrate into individual polyhedral and trapezohedral
forms averaging 5 to 6 mm across. The rocks lack stra-
tification, are very dense, and have little plasticity.
Thermal, silicate, and spectral analyses of the clay
fraction indicate beidellitic clay with abundant iron

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The "Brown" Clays of Southern Primor'ye and the Tertiary-Quaternary Boundary

(combined as ferribeidellite). The iron is also present in oxide form, which gives the rock its color (shades of brown). The change in the mineralogy of the sandy fraction of the clay layer depends on the original composition of the rock. This weathering crust is widely developed in the basin of the Ussuri River, where the parent rocks are biotite, pyroxene, plagioclase, and garnet gneisses; Archean and Proterozoic schists; migmatites; pegmatites; and late Tertiary basalts. In the basin of the Iman, Uliakhe, and Daubikhe Rivers, the crust of weathering has formed on porphyries and Permian mudstones and volcanics. The thickness ranges from 0.5 to 45 m (in the lower course of the Ussuri River). In places, redeposition of the crust has been observed, and the clays now rest on Pliocene gravels. The mineralogy of the reworked crust is the same as that of the clay which occurs in situ. The specific gravity of the latter is somewhat greater because heavy minerals from the parent rocks are still present in it. The author considers swelling in the clays to be the cause of movement of the crust. Such swelling

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15-1957-3-2800

The "Brown" Clays of Southern Primor'ye and the Tertiary-Quaternary Boundary

causes the volume to increase several times and induces the clay to creep over other rocks. The somewhat unclear geomorphological position of the "brown" clays has not permitted the stratigraphic position to be ascertained, and this uncertainty has led investigators to consider them as transitional formations between the Tertiary and the Quaternary. The nature of the weathering and the presence of pollen from xerophytic plants in both the "brown" clays and the underlying gravels permit their unification into the single Khankayskaya series. The underlying Suyfunskaya series was deposited in a moist and temperature climate, as shown by plant remains. A time boundary is clearly drawn between these two series. The gravels of the Khankayskaya series consist of slightly deformed layers, which were deposited by mountain streams. And inasmuch as they are covered by clays, they occur on divides and are not connected with modern networks of water drainage. This relation defines their age as pre-Quaternary (upper Pliocene). The Suyfunskaya series is considered to be lower Pliocene. The change in plant

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The "Brown" Clays of Southern Primor'ye and the Tertiary-Quaternary Boundary 15-1957-3-2800

varieties which occurred at the boundary between the two series does not agree with the opinion of A. N. Krishtofovich [Materialy po chetvertichnoy geologii SSSR (Data on the Quaternary Geology of the USSR), 1932, pt 17 on the persistence of life forms in the Far East. The fact that a thick crust of weathering developed is evidence that there was a long break in the tectonic activity of the region at the boundary of the Pliocene and the Quaternary.

Card 4/4

L. P. A.

ZHIVOTOVSKAYA, A.I.

Loess in the Ussuri Lowland. Mat. VSEGEI no.1:89-93 '56.

(MIRA 10:1)

(Ussuri Valley--Loess)

ZHIVOTOVSKAYA, A.I.

Structure of the Unguz series of the Unguz Kara Kum in Turkmenia.
Trudy VSEGEI 42:228-237 '60. (MIRA 14:9)
(Kara Kum--Geology, Stratigraphic)

ZHIVOTOVSKAYA, A.I.

Regularities in the distribution of sediments of the Unguz series
in the eastern part of the Unguz Kara Kum. Trudy VSEGEI 46.354-
363 '61. (MIRA 14:11)

(Kara Kum--Rocks, Sedimentary)

ZHIVOTOVSKAYA, A.I.; SHNEYDER, G.F.

Age of the Trans-Unguz series of Turkmenistan. Dokl. AN SSSR 138
no. 4: 895-896 Je '61 (MIRA 14:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskii institut i
Kompleksnaya neftegazovaya geologicheskaya ekspeditsiya Instituta
geologii i razrabotki goryuchikh iskopayemykh AN SSSR.
(Turkmenistan—Geology, Stratigraphic)

ZHIVOTOVSKAYA, A.I.

Bars in the bolithic basin of Middle Pliocene in the Zaunguzakys Karakumy.
Izv. AN Turk. SSR. Ser. fiz.-takh., khim. i geol. nauk. no. 4:94-102 163.

(MIRA 17:2)

1. Institut geologii AN Turkmenakoy SSR.

ZHIVOTOVSKAYA, A.I.

Pliocene river in the eastern trans-Unguz region. Trudy VSEGEI
109:44-54 '63. (MIRA 17:7)

ZHIVOTOVSKAYA, A.I.; KALDAROV, M.K.

Geological stages of the formation of underground waters in the northern Kara-Kum. Izv. AN Turk.SSR.Ser.fiz.-tekh., khim. i geol.nauk no.5:81-89 '65. (MIRA 18:11)

1. Institut pustyn' AN Turkmenskoy SSR. Submitted December 29, 1963.

ZHIVOTOVSKAYA, E.A., vrach

Case of a uterine-abdominal wall fistula in atresia of the cervical canal. Sbor. nauch. rab. Kaf. akush. i gin, GMI no.1:167-168 '60.
(MIRA 15:4)

1. Ginekologicheskoye otdeleniye rodit'nogo doma No.5 g. Gor'kogo.
Glavnyy vrach Shchukin, M.M. Zaveduyushchaya otdeleniyem Nemchaninova,
Ye.P.

(FISTULA, UTERINE) (UTERUS—DISEASES)

KAMENETSKIY, S.I., dotsent; LYUBOMUDROV, B.Ye.; ZHIVOTOVSKAYA, I.A.;
MATVEYEVA, K.M.; OFFENGENDEN, S.M. (Donetsk)

Pulmonary diseases in systemic vasculitis. Klin.med. no.12:72-
78 '61. (MIRA 15:9)

1. Iz kafedry fakul'tatskoy terapii No.2 (sav. - dotsent S.I.
Kamonetskiy) Donetskogo meditsinskogo instituta (dir. - dotsent
A.M. Ganichkin) i Donetskogo nauchno-issledovatel'skogo insti-
tuta fiziologii truda (dir. - kand.med.nauk B.N. Chupko).
(LUNGS--DISEASES) (PERIARTERITIS NODOSA)

KAMENETSKIY, S.I., dotsent; LYUBOMUDROV, V.Ye., kand.med.nauk;
ZHIVOTOVSKAYA, I.A.; MATEYEVA, K.M.

Early diagnosis and treatment of periarteritis nodosa. Vrach.
delo no.5:34-37 My '62. (MIRA 15:6)

1. Kafedra fakul'tetskoy terapii II (zav. - dotsent S.I.
Kamenetskiy) Donetskogo meditsinskogo instituta i klinicheskiy
otdel (ispolnyayushchiy obyazannosti rukovoditelya - kand.med.
nauk V.Y. Lyubomudrov) Donetskogo nauchno-issledovatel'skogo
instituta fiziologii truda.

(ARTERIES--DISEASES)

SMIRNOV, V.N., dotsent; ZHIVOTOVSKAYA, I.L., ordinator; MARCHENKO, L.A.,
ordinator; SLAVINA, I.P., ordinator

Eosinopenia as a symptom in the differential diagnosis of
myocardial infarct in its early stages. Kaz. med. zhur.
no. 4:11-13 JI-Ag '60. (MIRA 13:8)

1. Iz 1-y kafedry terapii (zav. - prof. L.M. Rakhlin)
Kazanskogo gosudarstvennogo institut dlya usovershenstvovaniya
vrachey im. V.I. Lenina.
(EOSINOPHILES) (HEART--INFRACTION)

GENDELEVICH, S.I.; ZHIVOTOVSKAYA, L.A.; POPPE, K.K.

Letters to the editor. Zhur.nevr.i psikh. 60 no.9:1240-1242 '60.

(MIRA 14:1)

(SCHIZOPHRENIA)

REZNIK, B.Ya. [Rieznik, B.IA.], kand.med.nauk; ZHIVOTOVSKAYA, S.Ya.
[Zhyvotovs'ka, S.Ia.]; APANOVICH, L.M.

Clinical characteristics of influenza in children. Ped., akush.
1 gin. 22 no.4:5-8 '60. (MIRA 14:5)

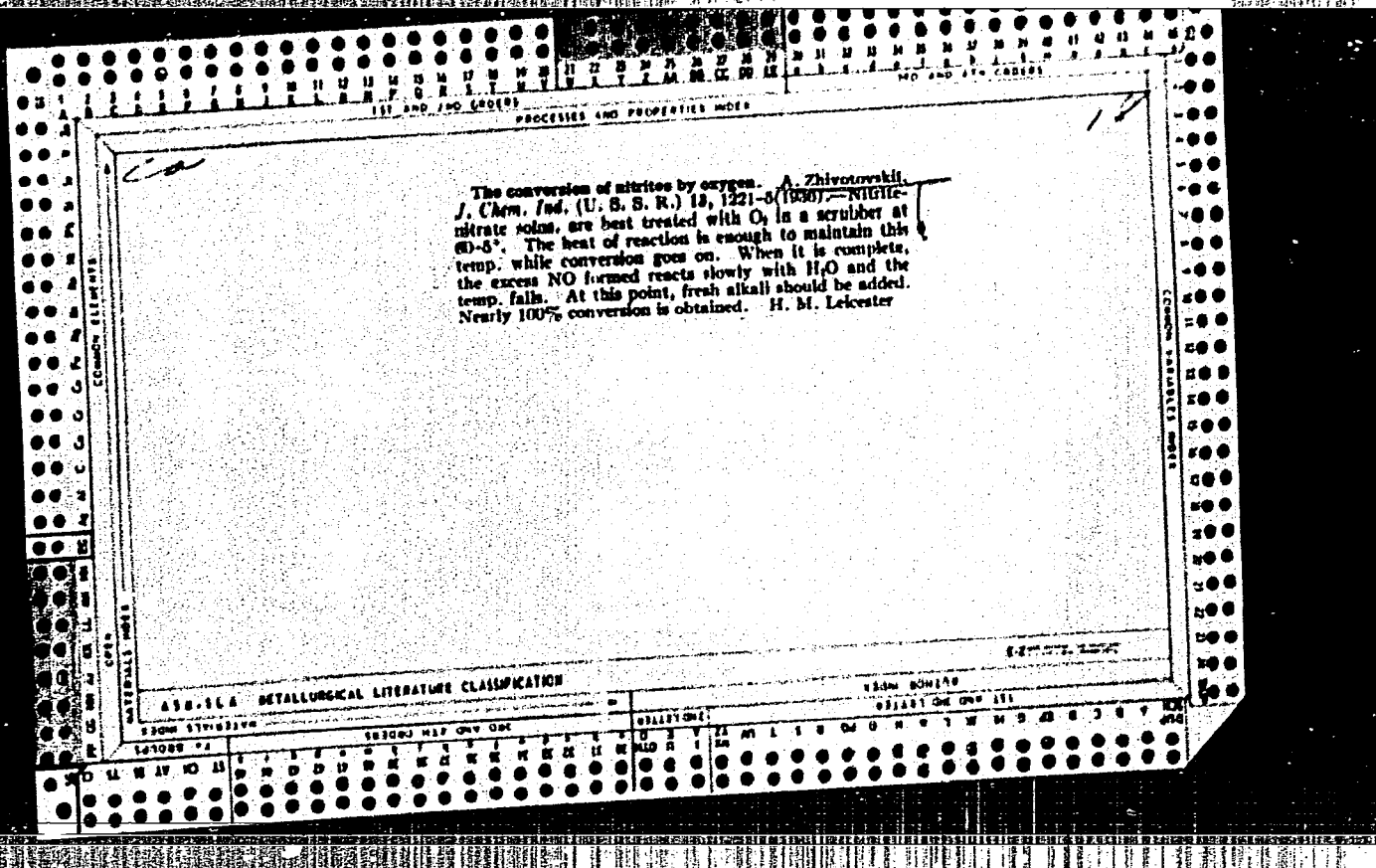
1. Klinika detskikh infektsionnykh bolezney (ispolnyayushchiy
obyazannosti zaveduyushchego kafedroy - B.Ya.Reznik) Stalinskogo
meditsinskogo instituta (direktor-dotsent A.M.Ganichkin [Hanichkin,
A.M.]) na baze Stalinskoy oblastnoy klinicheskoy bol'nitsy im. M.I.
Kalinina (glavnyy vrach - B.O.Shaparenko).
(INFLUENZA)

ZHIVOTOVSKAYA, Ye. D.

"On the Problem of Artificial Drying of the Sludge of City Waste Waters." Sub
20 Feb 51, Moscow Order of the Labor Red Banner Construction Engineering Inst imeni
V. V. Kuybyshev

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55



ZHIVOTOVSKIY, A.

Type of a river tanker! Rech. transp. 21 no.5:26-27 My '62.
(MIRA 15:5)

1. Nachal'nik Otdela Glavnogo konstruktora zavoda "Krasnoye
Sormovo".

(Tank vessels)

ACC NR: AR7000767 (N) SOURCE CODE: UR/0272/66/000/009/0064/0064

AUTHOR: Zhivotovskiy, A. A.; Konogray, B. Ya.

TITLE: Modern equipment for studying noise and vibration

SOURCE: Ref. zh. Metrologiya i izmeritel'naya tekhnika, Abs. 9.32.430

REF SOURCE: Sb. nauchn. tr. N.-i. gornorudn. in-t. USSR, no. 8, 1965, 153-167

TOPIC TAGS: acoustic noise, vibration, noise measurement, vibration measurement, *acoustic equipment*

ABSTRACT: A survey is presented of existing equipment for measuring noise and vibration. The instruments are classified on the basis of their different characteristics. The principles applied to the measurement of noise level and vibration, and to the analysis of noise and vibration are examined. A description is given of the technical characteristics of several modern instruments. The text contains eight illustrations. A bibliography of 6 titles is included. P. Agaletskiy. [Translation of abstract] [DW]

SUB CODE: 20, 14/

Card 1/1

UDC: 620.178.53:534.835.46

ZHIVOTOVSKIY, Aleksandr Andreyevich
ZHIVOTOVSKIY, Aleksandr Andreyevich; POZEMKIN, S.V., spetsial'nyy red.;
STRAKOVA, L.N., red.; BODANOVA, A.P., tekhn.red.

[New equipment and techniques for placer mining in the Northeastern
U.S.S.R.] Novaia tekhnika i tekhnologiya na razrabotke rossypel
Krainego Severo-Vostoka SSSR. [Magadan] Magadanskoe knizhnoe izd-vo,
1957. 103 p. (MIRA 11:2)
(Russia, Northeastern--Hydraulic mining)

Zhivotovskiy, A.A.

137-1958-2-2255

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 2, p 6 (USSR)

AUTHOR: Zhivotovskiy, A. A.

TITLE: What the Designers at Yagodnyy Are Working on (Nad.chem rabotayut konstruktory Yagodnogo)

PERIODICAL: Kolyma, 1957, Nr 6, pp 40-44

ABSTRACT: A description is given of special designs for: 1) a charging bin which permits the sand to be supplied to it directly by the scrapers; 2) a mobile metallic rock-dump attachment; 3) a system for installing an MPD-6 washer at the sand dump for underground mining and for use in the washing of sands from block surfaces in open-cut mining. Development engineers have drawn up designs for a helical water-removal unit for tailings and another for a mechanized rock-washing unit intended to cleanse the waste rock and remove it from the washer, etc.

A.Sh.

1. Mining--USSR 2. Equipment--Development 3. Equipment--Design

Card 1/1

ZHIVOTOVSKIY, A.A., inzh.; PERLIN, A.A., inzh.; REKSHINSKIY, M.S., inzh.;
SHALKIN, M.K., inzh.

In defense of structural elements without knees. Sudostroenie
29 no.9:9-10 S '63. (MIRA 16:11)

TSARINNIKOV, V.V.; IVANOV, G.N.; ZHIVOTOVSKIY, A.F.

Ship furniture made of plastics. Plast.massy no.7:50-54 '60.(MIRA 13:10)
(Furniture) (Plastics)

18

cx

Inversion of sodium nitrite with nitrogen oxides. A. G. Zhuravskii. *Khimia* 4, 380-4(1931); cf. Gogin and Minovich, *C. A.* 28, 1473. — Lab. expts. showed that the velocity of NaNO_2 inversion with N oxides is independent of the decreasing concn. of NaNO_2 and the increasing concn. of NaNO_2 in the soln., and that it decreases with the increasing concn. of salts (NaNO_2 , NaNO_3 , and other salts) in the original soln. The optimum temp. in the inversion tower is at 20-40°. The inversion of NaNO_2 ceases at the acidity of 0.2-0.3 mol./l., and any "nitrite" detected by analysis is dissolved HNO_2 and N oxides.
Chas. Blane

METALLURGICAL LITERATURE CLASSIFICATION

alkaline absorption of nitrogen oxides. A. O. Zhivotovskii. *Khimizol* 7, 186-62(1945); cf. C. A. 39, 300. Expts. showed that the rate of absorption of N oxides by NaOH solns. with the decreasing concn. of NaNO₂ and the correspondingly increasing concn. of NaNO₃ is not only not reduced but is even somewhat increased. With greater initial concn. of alk. solns. (NaOH, KOH, Na₂CO₃, NaHCO₃, etc.), the velocity of absorption of N oxides is decreased. The nature of an alkali at low concns. has practically no effect on the rate of absorption. The rate of absorption is practically unaffected by increasing temp. of NaOH soln. from 17° to 65°. These data, combined with the results of a study of the viscosities and densities of the solns., confirm the following *a priori* interpretation of the process in the light of the theory of absorption of gases by a liquid phase proposed by Lewis and Whitman (C. A. 19, 563). Because at the equal concns. the viscosity of alk. solns. is greater than that of NaNO₂ and NaNO₃ solns., the viscosity of the soln. in the process of absorption of N oxides is gradually lowered

with the decreasing concn. of the alkali and the increasing concn. of NaNO₂ and NaNO₃; hence the rate of absorption is decreased. Because the viscosities of solns. of alkalis, NaNO₂ and NaNO₃ at low concns. differ but little, the velocity of absorption of N oxides at a low initial concn. of alkalis should be equal for all kinds of alkalis. The viscosity of solns. of alkalis, NaNO₂ and NaNO₃ increases with their increased concn. (particularly with the solns. of NaOH and Na₂CO₃); hence the velocity of absorption of N oxides with the higher initial concn. of alkalis should be decreased. Since the viscosity of alk. solns. at 18-60° is changed very little, any changes of temp. of the liquid phase within this range should have no considerable effect on the velocity of the absorption of N oxides by alkalis. Thus the influence of the concn. and nature of an alkali on the velocity of absorption of N oxides is conditional by the viscosity and d. of its soln. Chas. Blanc

A 19. 563 - METALLURGICAL LITERATURE CLASSIFICATION

RESEARCH REPORT

EXPERIMENTAL

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2

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Abstracts of gas reaction balances. D. A. Chernobaev and A. G. Zhayeva. *Abstr. Acad. Nauk. U. R. S. R., Inst. Khim.* 728844c (1976) 1836, 60 pp. (English summary); *J. C. A.* 29, 3000^o: 21, 3075^o.—The equil. consts. of gas reactions are calcd. by precise and approx. methods, and accompanied by a series of tables. The most accurate results are obtained by spectroscopic methods, but calorimetric methods have attained a high degree of accuracy. A method is described for calcg. the equil. const. for gases at high pressures based on the works of Newton and Dodge (*J. C. A.* 29, 3000^o). Tables give a collection of data from the latest spectroscopic investigations, or, where these are lacking, other exptl. data. For the reactions of burning fuel, available spectroscopic data permit precise detn. of the const. By using the tables of free-energy values, $\log K_p$ for every 100° and in many instances for every 50°, up to 1500°K. can be detd. from the tables, and for higher temps. up to 3000° by interpolating: $\log K_p = (A/T) + B \log T + C$. A number of formulas are given for the reactions of the most important gases, and compds. of N, S, Cl and Br, and with an abs. error of not more than 0.001-0.002. B. Gutoff

ASS-51A METALLURGICAL LITERATURE CLASSIFICATION

COMMON ELEMENTS

COMMON VARIANTS

INTERNAL INDEX

EXTERNAL INDEX

SEARCH

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CLASSIFICATION

SEARCH

ZHIVOTOVSKIY, A.G.; VESELOVSKIY, T., tekhn. red.

[Scrubber apparatus with S-bend spray throwers and the effectiveness of the use in certain industries] Skrubbernaia kamera s S-obraznymi razbryzgivateliami i ratsional'nost' ee primeneniia v nekotorykh proizvodstvakh. L'vov, L'vovskii politekhn. in-t, 1959. 141 p.

(MIRA 14:7)

(Scrubber (Chemical technology))

ZHIVOTOVSKIY, A.G.; BABUSHKINA, N.A.

Absorption of bromine by solutions of sodium hydroxide,
soda, and milk of lime. Zhur. prikl. khim. 36 no.11:2343-
2350 N '63. (MIRA 17:1)

ZHIVOTOVSKIY, A.I., kand.tekhn.nauk; KRAYCHIK, A.B., inzh.

Calculation and design of oscillators and amplifiers for
ultrahigh frequencies. Izv.VEI no.25:3-15 '53.

(MIRA 13:2)

(Oscillators, Electron-tube)
(Amplifiers, Electron-tube)

ZHIVCOVSKIY, A. I.

"Toward an Analysis of the Operation of a Triode Oscillator in an Overvoltage System With Self-Bias," pp 166-175, ill, 12 ref

Abst: A method is suggested for computing the load characteristics of oscillators with separate excitation and with self-excitation, improving the possibility of analyzing their operation in an overvoltage system. The use of this method gives a clearer idea of the performance of tube oscillators in various systems and facilitates the choice of optimum operating conditions.

SOURCE: Izvestiya Leningr. Elektrotekhn. In-ta im. V. I. Ul'yanova (Lenina) (News of the Leningrad Electrical Engineering Institute imeni V. I. Ul'yakov /Lenin/), No 30, Leningrad, 1956

Sum 1854

ZHIVOTOVSKIY, A.I.

AUTHOR: ŽIVOTOVSKIJ, A.I. PA - 2013
TITLE: On the Computation of Composed Resonators.
(K rasčetu sloznych rezonatorov, Russian).
PERIODICAL: Radiotekhnika, 1957, Vol 12, Nr 1, pp 22-27 (U.S.S.R.)
Received: 2 / 1957 Reviewed: 3/1957

ABSTRACT: When increasing the working frequency the resonance in the trans-
versal higher harmonics is utilized. This measure leads to a decrease of the
input resistance of the resonator which is not under load, to a reduction of
efficiency and to a narrowing of the frequency transmission band. These disad-
vantages can be diminished or removed by using composed line guides. At first
simple line guides are used. When applying capacity at the beginning of the
homogeneous line the geometric length of this line is determined by

$L = l + (n-1) \frac{\lambda}{4}$, l is the geometric length from the beginning of the line to
the first voltage node, n is a whole positive number, and λ is the wave length
which corresponds to resonance frequency. n can be both even or odd. In the
present work only guide lines with an odd n are dealt with. At frequencies
near resonance a line, which is short-circuited at its end and to the initial
point of which a capacity is applied, can be replaced by equivalent oscillation
circuits with parameters that have the same resonance frequency, quality, and
input resistance. The formulae for the parameters of such an oscillation
circuit are set up and later also for other oscillation circuits.

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On the Computation of Composed Resonators

PA - 2013

In the composed lines, homogeneous domains of the length $\frac{1}{n}$ are added to the first homogeneous domain of the length 1. The formulae for the voltages in these oscillation circuits as well as for their quality are set up. The system of connected oscillation circuits is replaced by an equivalent oscillation circuit and the formulae for this parameter are set up. A table for the values computed according to these formulae is given for simple lines at $n=1$, $n=3$ and for composed lines at $n = 3$.

ASSOCIATION: Not given

PRESENTED BY:

SUBMITTED:

AVAILABLE: Library of Congress

CARD 2 / 2

6.4500
AUTHOR: Zhivotovskiy, A.I. 82974
S/142/60/003/002/014/022
E192/E382
TITLE: Wideband Amplification by Means of Tetrodes²⁵ in Ultrashort-wave Transmitters¹
PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiotekhnika, 1960, Vol. 3, No. 2, pp. 275 - 280
TEXT: Very high frequency tuned amplifiers based on tetrodes with grounded cathodes or grounded grids are considered (Figs. 1). The inertia of the electrons and the parasitic couplings between tuned circuits are neglected. The input and the output circuits of the amplifiers contain resonant circuits which are tuned to the centre frequency of a given bandwidth. The bandwidth of a single resonant circuit is inversely proportional to C_3 and R_3 , where C_3 is the capacitance of the circuit and R_3 is its resistance during resonance. At metre and decimetre waves the resonant circuits are formed by short-circuited coaxial lines. The capacitance of such a line can be expressed by:
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Wideband Amplification by Means of Tetrodes in Ultrashort-wave Transmitters

$$C_3 = \frac{1}{2} C_{\text{in}} \left(1 + \frac{2\theta}{\sin 2\theta} \right) \quad (1)$$

where C_{in} is the input or output capacitance of the tube to which the line is connected, while θ is the electrical length of the line. In practice, $\theta < 90^\circ$ or it is contained between 180 and 270° . These two cases are illustrated in Fig. 2, where C_3 is plotted against $W\theta C_{\text{in}}$, where W is the wave impedance of the line. The output resistance of the resonant-circuit of the grounded cathode amplifier is given by Eq. (3), while that of the grounded grid amplifier is expressed by Eq. (4); in these expressions, $e_{a \text{ min}}$ is the minimum anode voltage in the critical regime, U_K is the voltage amplitude between the anode and the cathode, U_g is

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the amplitude of the voltage between the control grid and the cathode, $\eta = 0.5 \gamma \xi$ is the efficiency of the anode circuit, $\gamma = I_{al}/I_{ao}$ is the form factor of the anode current and P_a are the anode losses of the tube. The function $f(e)$ of Eqs. (3) and (4) is plotted in Fig. 3 for various values of the flow angle. From Fig. 3, it is seen that by choosing suitable operating conditions, it is possible to obtain a minimum value of the equivalent output resistance. The power-reduction coefficient for an amplifier is expressed by Eq. (8), where $\alpha = 2\Delta\omega/\omega$ represents the deviation from the centre frequency and Q_{BX} is the quality factor of the input circuit, while Q_{Bb1X} is the quality factor of the output circuit. The ratio of the power-reduction coefficients of the grounded cathode and the grounded grid amplifiers a_1/a_2 is expressed by Eq. (15), where m represents the ratio of the amplification coefficients for the two amplifiers and n is the

X

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Wideband Amplification by Means of Tetrodes in Ultrashort-wave Transmitters

ratio of their equivalent capacitances. The function a_1/a_2 is plotted in Fig. 5. From the analysis, it is seen that the power gain of the amplifier with the grounded grid is comparatively small but its amplitude-frequency distortion is lower than that of the grounded-cathode amplifier. There are 5 figures and 4 Soviet references.

ASSOCIATION: Kafedra radioperedayushchikh ustroystv Leningradskogo elektrotekhnicheskogo instituta im. V.I. Ul'yanova (Lenina) (Chair of Radio Transmission Devices of Leningrad Electrotechnical Institute im. V.I. Ul'yanov (Lenin)).

SUBMITTED: July 6, 1959, initially;
October 8, 1959, after revision.

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39706

S/142/62/005/002/009/019
E192/E382

C.4710 (also 2104)

AUTHORS: Zhivotovskiy, A.I., Krivenko, A.S. and Polevoy, V.V.

TITLE: Non-tuned high-frequency stages in transmitters

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy,
Radiotekhnika, v. 5, no. 2, 1962. 224 - 233

TEXT: The two simple circuits shown in Fig. 1 can be used for constructing wideband high-frequency amplifying stages for radio transmitters. The impedances of these circuits can be described as $Z_{\rho} = \rho A_{1,2}$, where $\rho = \sqrt{L/C}$ and the functions A for the two circuits are given by:

$$A_1 = \frac{\delta^2 + k^2}{(k^2 - 1) + k^2 \delta^2}; \quad A_2 = k \sqrt{\frac{1 + k^2 \delta^2}{(k^2 - 1) + k^2 \delta^2}}$$

where $\delta = R/\rho$, $k = \omega/\omega_0$ and $\omega_0 = 1/\sqrt{LC}$. The formulae are analyzed and it is found that for the case of $\delta = \sqrt{2}$ the impedance of the first circuit is practically constant at Card (1/14)

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Non-tuned high-frequency

frequencies from $\omega = 0$ to $\omega = \omega_0 / \sqrt{2}$, while the impedance of the second circuit is constant up to frequencies of $\omega = \omega_0 / \sqrt{2}$. The circuits are thus suitable for wideband amplifiers and their impedance for the case of $b = \sqrt{2}$ is $\omega_0 / 2$. The first of the circuits is used in compensated amplifiers while the second circuit is difficult to use at frequencies above several Mc/s. Wideband amplification for the transmitters can be produced by distributed amplifiers whose gain is expressed by:

$$K = \frac{S \rho_a}{2} \cdot n \quad (2)$$

and whose maximum output voltage is given by:

$$U_{m \max} = I_{a1 \max} \frac{\rho_a}{2} n$$

where n is the number of tubes employed in the amplifier,

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Non-tuned high-frequency

$\rho_a = m/\pi f_{KP} C_a$ is the wave impedance of the anode line,

$$f_{KP} = \frac{1}{\pi \sqrt{L_a C_a}}$$

is the critical frequency of the anode line and C_a and L_a are the capacitance and the inductance of a line cell. Analysis of the distributed amplifiers shows that these should be based on tubes having a high slope, small capacitances and large currents at $e_g = 0$ and $e_a = e_{a \text{ min}}$ (where e_g is the grid voltage and e_a is the anode voltage). A method of designing a distributed amplifier is described, the design being based on the following parameters: upper and lower cut-off frequencies; load capacitances, output-voltage amplitude and the input-voltage amplifier. The problem of matching artificial lines

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Non-tuned high-frequency

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by means of exponential transformer lines is considered and it is shown that the number of sections in the exponential transformer increases with the ratio of impedances of the lines to be matched. An experimental distributed amplifier based on tubes type 6P15P (6P15P) and consisting of 10 tubes with 35 pF capacitances was built and tested experimentally. It is thought that distributed amplifiers are particularly suitable for wide-band transmitters and that their circuits can be considerably simplified by employing special high-slope tubes. There are 8 figures. 4

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ZHIVOTOVSKIY, A.I.; ALEKSEYEV, O.V.

Construction of wide-band non-retunable transmitter stages. Radio-
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ASSONOV, Aleksandr Danilovich, SHEPRLYAKOVSKIY, Konstantin Zakharovich,;
LANKIN, Petr Aleksandrovich,; YAITSKOV, S.A., inzh.; SHKLYAROV,
I.N., inzh.; RABIN, M.O., inzh.; SEMYUSHKIN, N.V.; ZHIVOTOVSKIY,
A.N.; BORISOV, N.I.; SEMYKOV, A.A., doktor tekhn. nauk, red.;
LOZINSKIY, M.G., doktor tekhn. nauk, retsenzent,; MODEL', B.I., tekhn. red.

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(Cementation(Metallurgy))

ZHIVOTOVSKIY, D. M. BRAVO

SEE ALSO: BRAVO-ZHIVOTOVSKIY, D. M.

ZHIVOTOVSKIY, I.I.

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b3

PHASE I BOOK EXPLOITATION

SOV/1297

Vsesoyuznaya nauchno-tehnicheskaya konferentsiya po primeneniyu radioaktivnykh i stabil'nykh izotopov i izlucheniye v narodnom khozyaystve i nauke, Moscow, 1957

Polucheniye izotopov. Moshchnyye gamma-ustanovki. Radiometriya i dozimetriya; trudy konferentsii... (Isotope Production. High-energy Gamma-Radiation Facilities. Radiometry and Dosimetry; Transactions of the All-Union Conference on the Use of Radioactive and Stable Isotopes and Radiation in the National Economy and Science) Moscow, Izd-vo AN SSSR, 1958. 293 p. 5,000 copies printed.

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Card 1/12

Isotope Production (Cont.)

SOV/1297

PURPOSE: This collection is published for scientists, technologists, persons engaged in medicine or medical research, and others concerned with the production and/or use of radioactive and stable isotopes and radiation.

COVERAGE: Thirty-eight reports are included in this collection under three main subject divisions: 1) production of isotopes 2) high-energy gamma-radiation facilities, and 3) radiometry and dosimetry.

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Zolotarev, V.S. Stable Isotopes Enriched by the Electromagnetic Method

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Gusev, V.M. Ultra High-temperature Ion Source for the Electromagnetic Separation of Isotopes of Platinum Group Elements

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A method is described for enriching natural mixtures containing ~18.6 percent B^{10} concentration to ~80 percent B^{10} concentration by low temperature (~ - 100 degrees, scale not stated) adiabatic rectification. Separation capability was B^{10} of 95-96 percent purity after 480 hours processing; but, as the desired concentration was ~80 percent, separation yield was 4 liters per 24 hours. Block diagrams of installations are given.

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requiring high dosage (microorganisms, biological substrates) c) industrial radiation of biological products requiring sterilization, preservation, disinfection, etc. d) medical and therapeutical purposes.

Breger, A. Kh., V.A. Belynskiy, V.L. Karpov, S.D. Prokudin and V.B. Osipov. Facility for Radiation-Chemical Research Employing Co^{60} Gamma-Radiation Source With an Activity of 21,000 g-ev of Radium

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A K-20000 Co^{60} gamma-radiation source, cited as the most powerful in the world according to available data, is described and basic parameters tabulated. The unit is provided with a control panel and a system of periodic observation and is capable of 1200 r/sec dosage per 0.4 liters and ~ 100 r/sec per 100 liters volume. Working chamber capacity is ~ 300 liters. The source, comprising 56 standard Co^{60} preparations, the authors state, is safe for attending personnel owing to a "dry" method especially developed for this unit.

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