

SMIRNOVA, G.M.; YEGOROVA, L.A.; KALININA, V.I.; UKHANOVA, V.A.;  
BEZGUBOVA, L.V.; ARTAMONOVA, V.V.; SHOL'YANINOVA, G.A.

Retardation of acid accumulation in case of continuous method  
of bread preparation from grade I wheat flour with a dough making  
machine with continuous action. Trudy TSNIKRP no.8:151-152 '60.  
(MIRA 15:8)

(Dough)

ACC NR: AP6027432

SOURCE CODE: LR/0125/66/000/007/0054/0057

AUTHOR: Chekotilo, L. V.; Artamonov, V. L.; Orlov, V. A.

51B

ORG: [Chekotilo, Artamonov] Electric Welding Institute in. Ye. O. Paton, AN UkrSSR  
(Institut elektrosvariki AN UkrSSR); [Orlov] First State Bearing Plant (Pervyy gosudarstvennyy podshipnikovyy zavod)

TITLE: Submerged-arc welding of oxidation-resistant austenitic Kh25N20S2 steel and Kh18N35S3 alloy

SOURCE: 'Avtomaticheskaya svarka, no. 7, 1966, 54-57

TOPIC TAGS: <sup>alloy</sup> austenitic steel, chromium ~~nickel~~ steel, ~~chromium~~ nickel alloy, ~~corrosion~~ resistant steel, metal welding/Kh25N20S2 steel, Kh18N35 alloy

ABSTRACT: Automatic submerged-arc welding of oxidation-resistant Kh25N20S2 steel and Kh18N35S3 alloy (both are susceptible to hot cracking owing to a high silicon content) can be done successfully with EP532 (Kh25N20SRI) electrode wire containing 2.5-3% silicon and 0.4-0.7% boron and an ANF-22 flux. The wire should be 2.0-2.5 mm in diameter. For wires with a boron content over 0.5%, ANF-23 flux should be used. To reduce further the weld cracking, preheating to 200-250C is recommended. The joints welded with EP532 wire possess a fairly high heat resistance. For instance, the rupture life at 900C of Kh25N20S2 alloy welds austenized at 1100C and aged at 750C for 5 hr was 177 hr under a stress of 2.5 kg/mm<sup>2</sup> and 705 hr under a stress of 2 kg/mm<sup>2</sup>. Due to a high silicon content in EP532 wire, the welds are not susceptible

Card 1/2

UDC: 621.791.756:669.15-194

ACC NR: AP6027432

to carburization and are oxidation resistant at high temperatures. The new method of automatic welding has been successfully introduced in the industry. Orig. art. has: 4 figures and 4 tables. [TD]

SUB CODE: 11, 13/ SUBM DATE: 13Jan66/ ORIG REF: 004/ ATD PRESS: 5060

Card 2/2 *efh*

ARTAMONOVA, V.Ye., sanitarnyy vrach

Antiepidemiological work in consolidated rural hospital. Gig. i san.  
23 no.4:45-47 Ap '58. (MIRA 11:6)

1. Iz bol'nitsy Mikhaylovskogo rayona Altayskogo kraya.  
(HOSPITALS,  
sanit. & anti-epidemiol. activities of unified rural  
hosp. (Rus))

BORYCHEV, Nikolay Ivanovich; ARTAKONOV, Ya.P., otv. red.; OSVAL'D, E.Ya.,  
red. izd-va; BERESLAVSKAYA, L.Sh., tekhn. red.

[Aid for the public inspector for the protection of workers in the  
coal industry] V pomoshch' obshchestvennomu inspektoru po okhrane  
truda v ugol'noi promyshlennosti. Moskva, Gos. nauchno-tekhn. izd-  
vo lit-ry po gornomu delu, 1960. 88 p. (MIRA 14:7)  
(Coal mines and mining—Safety measures)

ARTAMONOVA, YE. G.

ARTAMONOVA, YE. G.: "The detection of conditions necessary for crop formation by lucerne in the central regions of the non-chernozem zone." "All-Union Sci R's Inst of Fodder imeni V. R. Vili'yams. Yaroslavl', 1955.  
(Dissertation for the degree of Candidate in Agricultural Sciences)

SO: Knizhnaya Letopis', No 36, 1956, Moscow.



FD-1510

USSR/Chemistry - Inorganic

Card 1/1 : Pub. 129-13/18

Author : Simanov, Yu. P.; Lapitskiy, A. V.; Artamonova, Ye. P.

Title : Some properties of tantalum pentoxide. Report 2

Periodical : Vest. Mosk., un., fizikom. 1 yest. nauk, 9, No 6, 109-113, Sep 54

Abstract : Investigated the various modifications of tantalum pentoxide and established the presence of three new modifications. Determined the parameters of the lattices of the new modifications and studied the conditions under which one modification converts to another. Seven references. (Five USSR)

Institution : Chair of Inorganic Chemistry

Submitted : July 18, 1953



**"APPROVED FOR RELEASE: 09/24/2001**

**CIA-RDP86-00513R000102220005-9**

**APPROVED FOR RELEASE: 09/24/2001**

**CIA-RDP86-00513R000102220005-9"**

LAPITSKIY, A.V.; POSPELOVA, L.A.; ARYANONOVA, Ye.P.

Study of the dissolving action of water and of mineral acids on niobium and tantalum pentoxides. Zhur. neorg. khim. 1 no. 4:650-659  
Ap '56. (MLRA 9:10)

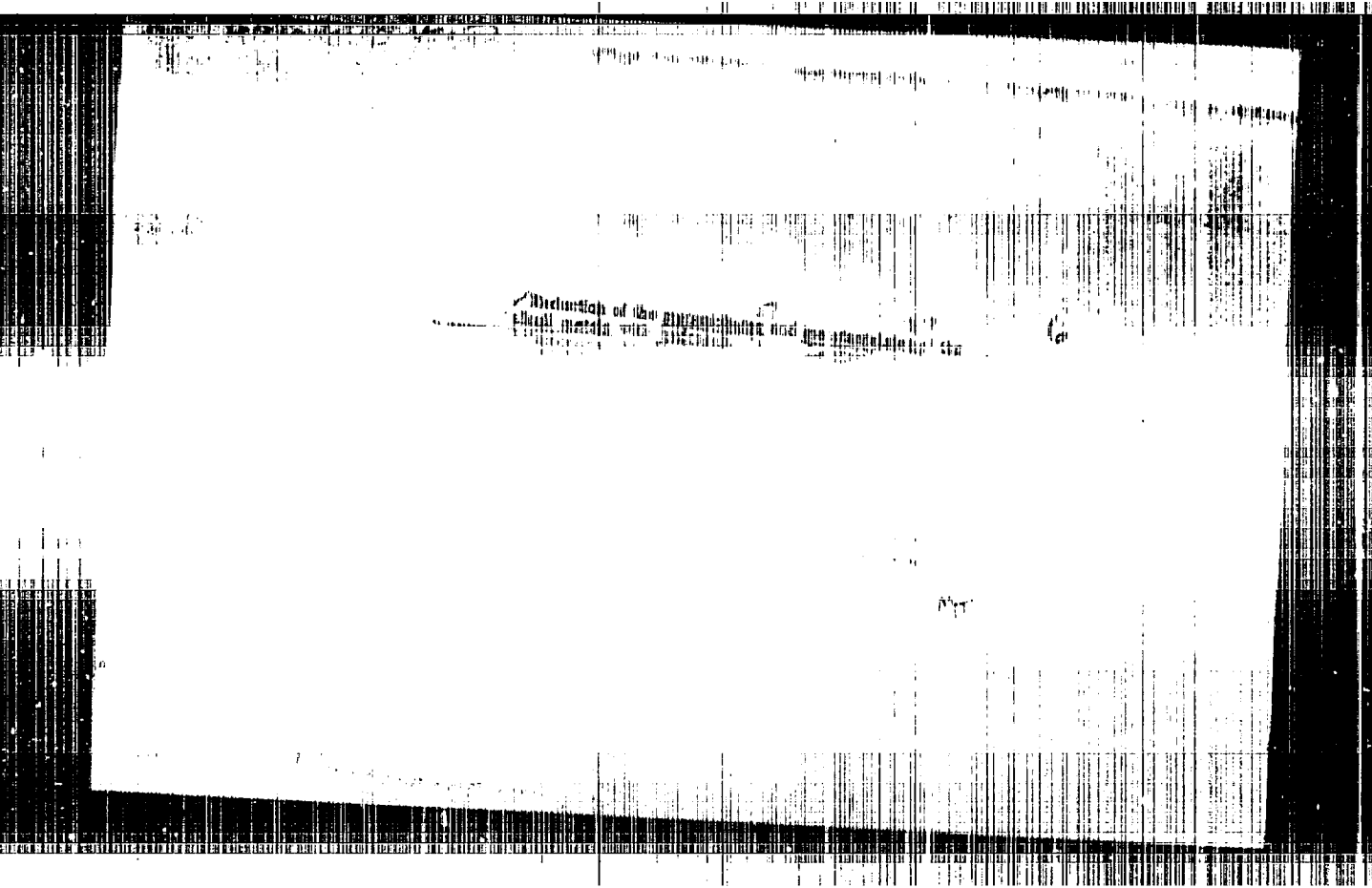
1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova.  
(Oxides) (Solubility)

"APPROVED FOR RELEASE: 09/24/2001

CIA-RDP86-00513R000102220005-9

APPROVED FOR RELEASE: 09/24/2001

CIA-RDP86-00513R000102220005-9"



21338

15 2210 4016, 1273, 1145

8/078/61/006/004/010/018  
B107/B218

AUTHORS: Lapitskiy, A. V., Artamonova, Ye. P.

TITLE: Products of the reduction of metaniobates of bivalent metals by hydrogen

PERIODICAL: Zhurnal neorganicheskoy khimii, v. 6, no. 4, 1961, 904-908

TEXT: The reduction of the following metaniobates by hydrogen between 400 and 1200°C was studied:  $\text{Be}(\text{NbO}_3)_2$ ,  $\text{Mg}(\text{NbO}_3)_2$ ,  $\text{Ca}(\text{NbO}_3)_2$ ,  $\text{Sr}(\text{NbO}_3)_2$ ,  $\text{Ba}(\text{NbO}_3)_2$ ,  $\text{Fe}(\text{NbO}_3)_2$ , and  $\text{Pb}(\text{NbO}_3)_2$ . All compounds had been prepared and analyzed in the authors' laboratory. The experimental technique is described in an earlier paper (Ref. 1: A. V. Lapitskiy, Ye. P. Artamonova. Zh. neorgan. khimii, 2, 820 (1957)). The samples were first annealed at 1200°C in the open air. X-ray pictures show that this did not lead to any change in the crystal structure. Reduction in a hydrogen atmosphere was carried out for 5 to 20 hr until a constant weight was attained. The strongest change in weight was exhibited by niobates of beryllium (Fig. 1), iron (Fig. 1), and lead (Fig. 3). The reduction product of beryllium

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Products of the reduction of...

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metaniobate is a pure niobium oxide. X-ray analysis yielded  $\text{NbO}_2$  with  $a = 4.84 \text{ \AA}$  and  $c = 2.99 \text{ \AA}$ . Under these conditions,  $\text{NbO}$  is volatile because of the formation of an aerosol of beryllium hydroxide, as was proved by a special test series. A second experiment (30 hr at  $1200^\circ\text{C}$ ) yielded  $\text{NbO}$  and  $\text{NbO}_2$  in a ratio of 4:1. The following reactions are most likely to occur in the reduction of lead metaniobate:  $\text{Pb}(\text{NbO}_3)_2 = \text{PbO} + \text{Nb}_2\text{O}_5$ ;  $\text{Nb}_2\text{O}_5 + \text{H}_2 = 2\text{NbO}_2 + \text{H}_2\text{O}$ ;  $\text{PbO} + \text{H}_2 = \text{Pb} + \text{H}_2\text{O}$ . Lead evaporates, and  $\text{NbO}_2$  is left behind. The volatility of elementary lead was studied separately (Fig. 3, curve 2). Ferroniobate decomposes at  $600^\circ\text{C}$ , and  $\text{Nb}_2\text{O}_5$  (high-temperature form) is formed. At  $1200^\circ\text{C}$ , metallic iron,  $\text{NbO}$ , and  $\text{NbO}_2$  are found in the powder pattern. Under the above conditions, the reduction of alkaline-earth metaniobates proceeds less readily (Fig. 2). The reduction products were treated with dilute  $\text{HCl}$ , after which  $\text{Mg}$ ,  $\text{Ca}$ ,  $\text{Sr}$ , and  $\text{Ba}$  were microchemically determined in the solution. This is, however, impossible when metaniobates are treated with  $\text{HCl}$ . Weak lines in the powder patterns indicate the formation of  $\text{NbO}_2$  and alkaline-earth oxides. The authors thank A. P. Golovina, P. K. Agasyan, and L. P. Reshetnikova who assisted

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Products of the reduction of...

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B107/B218

in the experiments, and Vikt. I. Spitsyn and Yu. P. Simanov for discussions. There are 4 figures and 13 references: 9 Soviet-bloc. The three references to English-language publications read as follows: J. Elston, Proc. 2 United Nations Intern. Confer. of Peaceful uses of Atom. Energ. 5, 334 (1958); N. D. Ervey, R. L. Seifert, J. Electrochem. Soc., 98, 83 (1951); L. I. Grossweiner, R. L. Seifert, J. Amer. Chem. Soc., 74, 2701 (1952).

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova  
Laboratoriya radiokhimii (Moscow State University imeni  
M. V. Lomonosov, Laboratory for Radiochemistry)

Card 3/5

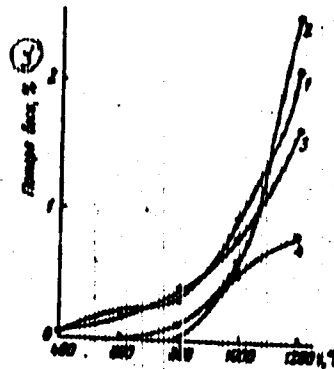
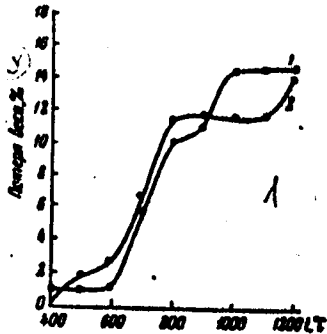
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Products of the reduction of...

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B107/B218

Fig. 1: Reduction by hydrogen.  
Legend: 1)  $\text{Be}(\text{NbO}_3)_2$ ; 2)  $\text{Fe}(\text{NbO}_3)_2$ ;  
y) loss in weight, %.

Fig. 2: Reduction by hydrogen.  
Legend: 1)  $\text{Mg}(\text{NbO}_3)_2$ ; 2)  $\text{Ca}(\text{NbO}_3)_2$ ;  
3)  $\text{Sr}(\text{NbO}_3)_2$ ; 4)  $\text{Ba}(\text{NbO}_3)_2$ ; y) loss  
in weight, %.



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Products of the reduction of...

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B107/B218

Legend to Fig. 3: 1) Reduction of  $Pb(NbO_3)_2$  by hydrogen; 2) evaporation of lead in a hydrogen atmosphere; y) loss in weight, %.

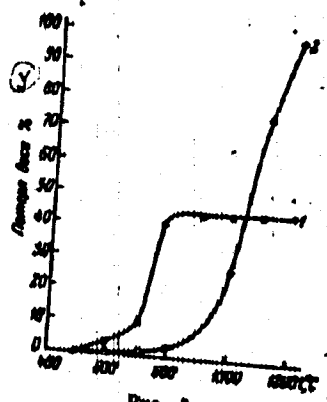


FIG. 3.

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S/020/61/141/001/012/021  
B103/B14

AUTHORS: Lapitskiy, A. V., Vlasov, L. G., Artamonova, Ye. P., and Zylkovskiy, Yu.

TITLE: Study of interaction of aqueous potassium metaniotote with oxalic acid

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 141, no. 1, 1961, 101 - 103

TEXT: The authors studied, by means of physicochemical analysis, the system  $\text{KNbO}_3 - \text{H}_2\text{C}_2\text{O}_4 - \text{H}_2\text{O}$  both in isomolar series and in series with constant  $\text{KNbO}_3$  concentration. They measured: electrical conductivity, optical density, transparency, lowering of the freezing point, viscosity, pH, and diffusion coefficient. When measuring the latter, they used  $\text{Nb}^{95}$  as a label. The composition - property curves usually show two extrema: (a) at a molar ratio  $\text{KNbO}_3 : \text{H}_2\text{C}_2\text{O}_4 = 1 : 0.5$ , and (b) at a ratio of 1:1. At the ratio of 1:1, the interaction may take place:  
 $\text{KNbO}_3 + \text{H}_2\text{C}_2\text{O}_4 = \text{KHC}_2\text{O}_4 + \text{HNB}_3$  (1);  $\text{KNbO}_3 + \text{H}_2\text{C}_2\text{O}_4 = \text{K}[\text{NbO}_2\text{C}_2\text{O}_4] + \text{H}_2\text{O}$  (2)

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... of the coefficient of ... unchanged up to the ratio of

Study of interaction of aqueous...

S/020/61/141/001/012/021  
B105/3147

1:10. At a  $\text{pH} < 2$ , the complex is in solution in a strongly hydrolyzed state since the coefficient of self-diffusion is strongly reduced. At a  $\text{pH}$  of 1.8, it remained constant for various ratios between 1:1 and 1:10. Thus, only one compound,  $\text{K}[\text{NbO}_2\text{C}_2\text{O}_4]$ , is formed. The instability constant of the complex ion was found to be  $8 \cdot 10^{-4}$ . A compound with a ratio  $\text{Nb} : \text{H}_2\text{C}_2\text{O}_4 = 1:3$  could not be found by the authors (contrary to F. Russ, Zs. anorg. Chem., 31, 42 (1902)). There are 3 figures and 4 references: 1 Soviet and 3 non-Soviet. The reference to the English-language publication reads as follows: C. G. Fink, L. G. Jenness, Am. Inst. of Min. and Met. Eng., Technical Publ., 1931, p. 147.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova  
(Moscow State University imeni M. V. Lomonosov)

PRESENTED: April 22, 1961, by I. I. Chernyayev, Academician

SUBMITTED: April 14, 1961

Card 3/3

S/078/62/007/008/003/008  
B101/B138

AUTHORS: Lapitskiy, A. V., Artamonova, Ye. P.

TITLE: Hydrogen reduction of metatantalates of various metals

PERIODICAL: Zhurnal neorganicheskoy khimii, v. 7, no. 8, 1962, 1908-1912

TEXT: The metatantalates  $\text{LiTaO}_3$ ,  $\text{NaTaO}_3$ ,  $\text{KTaO}_3$ ,  $\text{RbTaO}_3$ ,  $\text{CsTaO}_3$ ,  $\text{Be}(\text{TaO}_3)_2$ ,  $\text{Mg}(\text{TaO}_3)_2$ ,  $\text{Ca}(\text{TaO}_3)_2$ ,  $\text{Sr}(\text{TaO}_3)_2$ ,  $\text{Ba}(\text{TaO}_3)_2$ ,  $\text{Fe}(\text{TaO}_3)_2$ , and  $\text{Pb}(\text{TaO}_3)_2$  were heated in a hydrogen atmosphere at 400 - 1200°C and the constant weight reached was determined. For apparatus and methods see Zh. neorgan. khimii, 2, 820 (1957). Weight became constant after 4 - 80 hrs, depending on the metatantalate. Results: (1) Alkali metatantalates showed maximum

loss in weight above 600 - 700°C. Chemical analysis showed that the reaction  $2\text{MeTaO}_3 = \text{Me}_2\text{O} + \text{Ta}_2\text{O}_5$ ;  $\text{Ta}_2\text{O}_5 + \text{H}_2 = 2\text{TaO}_2 + \text{H}_2\text{O}$  must have occurred. The metal oxide is volatilized. Na and K compounds were more stable than Li, Rb, and Cs. (2) Except for  $\text{Be}(\text{TaO}_3)_2$ , the metatantalates of the alkaline earth metals showed high thermal stability. The Be

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Hydrogen reduction of metatantalates ...

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B101/B138

compound was reduced the most intensively and BeO was volatilized. The reduction product had the ratio  $\text{BeO} : \text{Ta}_2\text{O}_5 \sim 0.6$ . (3) Powder patterns of heated  $\text{Fe}(\text{TaO}_3)_2$  showed the (011), (002), (112), and (022) lines of  $\alpha$ -Fe, and, very faintly, those of FeO. The process follows the reaction:  $\text{Fe}(\text{TaO}_3)_2 = \text{FeO} + \text{Ta}_2\text{O}_5$ ;  $\text{FeO} + \text{H}_2 = \text{Fe} + \text{H}_2\text{O}$ . As the loss in weight is only 4.28%, the reaction is not completed. (4) In  $\text{Pb}(\text{TaO}_3)_2$  most of the reduced lead volatilizes (loss in weight: 31.02%). Conclusions: At high temperatures hydrogen reduction of metatantalates can only occur if cations with marked polarizing effect are present. There are 4 figures and 2 tables. ✓

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova, Kafedra radiokhimii (Moscow State University imeni M. V. Lomonosov, Department of Radiochemistry)

SUBMITTED: September 13, 1961

Card 2/2

GELETSEANU, I.; LAPITSKIY, A.V.; VEYNER, M.; SALIMOV, M.A.;  
ARTAMONOVA, Ye.P.

Thorium acetates. Radiokhimiia 6 no. 1:93-101. '64.  
(MIRA 17:6)

SECRET

CONFIDENTIAL

Chemical Abst.  
Vol. 48 No. 5  
Mar. 10, 1954  
Metallurgy and Metallography

50  
Corrosion of steel by kerosine and methods of its inhibition. I. K. Pecher, L. D. Glushko, B. V. Antonovskaya, and V. A. Kabanov. *Zhur. Priklad. Khim.* 26, 247-54 (1953); cf. *C.A.* 48, 5100. — Contrary to conclusions drawn from work on the corrosive action of gasoline and hydrocarbons (*J. C.A.* 31, 4257, 1787; 33, 3749) kerosine was found to be corrosive to steels. The rate of corrosion for kerosines treated in different manners, in diminishing order, are as follows: kerosine (I no. 0.30); acid with water; redistilled with Na and acid with H<sub>2</sub>O; and treated with Na. The analysis of the products of corrosion were 91% Fe<sup>+++</sup> salt of org. acids and 10% Fe<sub>2</sub>O<sub>3</sub>. This acid was more than the kerosine contained originally, and it continued to increase to 35 times its original content after the steel had been removed. This suggests induced autocatalytic oxidation of kerosine when in contact with steel, and shows that the rate of oxidation is greater than the rate of combination of acid formed with Fe. The addition of a 1% soln. of Na benzoate prevents corrosion in the water phase, but corrosion continues in the kerosine phase. Org. substances contg. Cl, S, NH<sub>2</sub>, and OH are suggested as inhibitors (*cf. C.A.* 46, 5510).



USSR

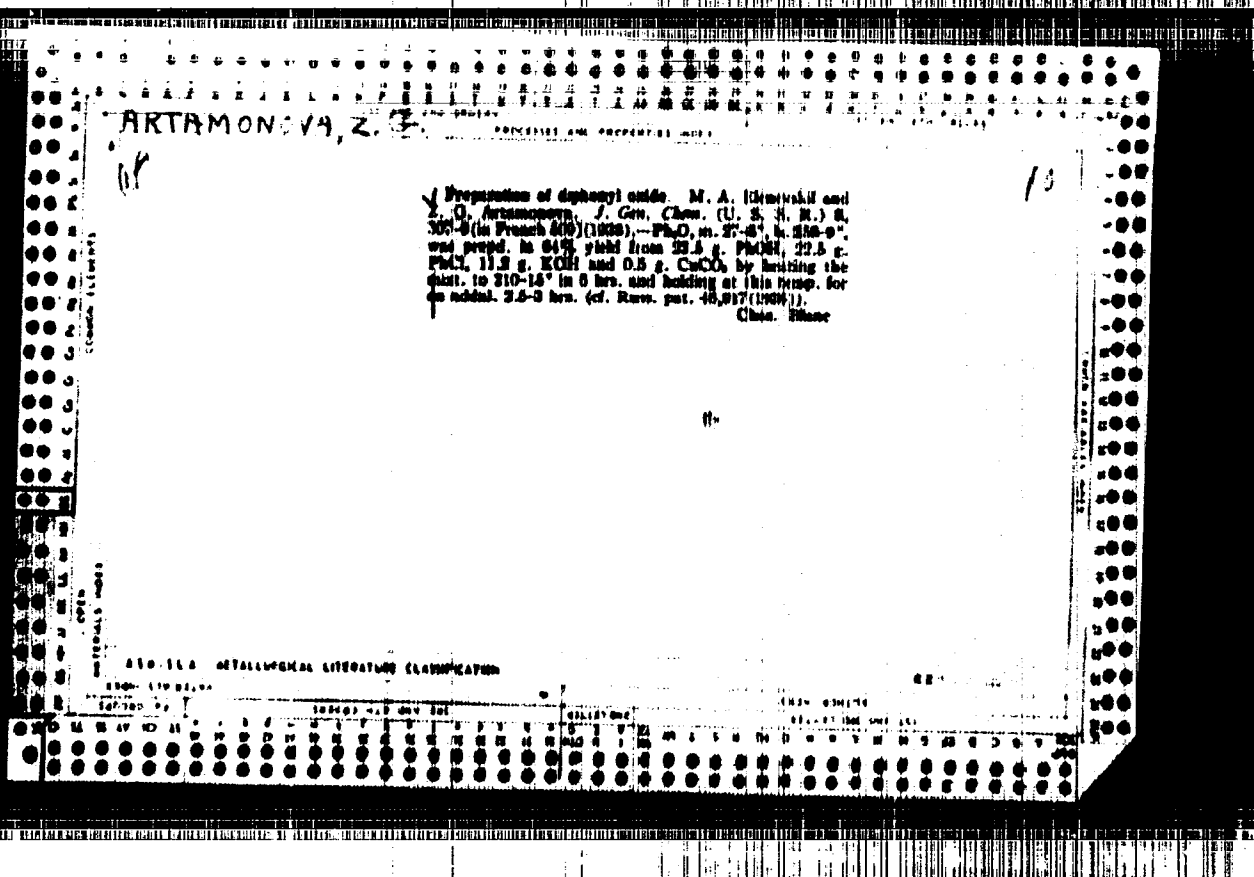
The corrosion of metals by a solution of...  
 lora, L. G. Gladis, and B. V. A. (unintelligible).  
 Nezd. S.S.S.R. 90. 488-491 (1957).  
 The corrosion of the following metals and alloys in...  
 was studied by noting the rate for surface dissolution...  
 appear: Steel 1: C 0.10, Mn 0.40, Si 0.30, S 0.040, P 0.00...  
 Ni 0.30, Cr 0.30%. Steel 2: C 0.10, Mn 0.60, Si 0.10...  
 S 0.040, P 0.005, Ni 0.30, Cr 0.30%. Steel 3: C 1.10...  
 Mn 0.90, Si 0.30, Cr 1.10, W 1.50%. Steel 4: C 0.10...  
 Mn 0.80, Si 0.10, S 0.02, P 0.027, Ni 0.50, Cr 1.10...  
 Steel 5: C 0.30, Mn 0.75, Si 0.40, Cr 0.40, Cr 1.10...  
 Mg: Fe 0.00%, traces of Si, Mg: Al 0.10, Mn 0.10...  
 Zn 0.3, Cu 0.05, Ni 0.01, Bi 0.20, Be 0.05, Be 0.20...  
 Mg-2: Al 0.3, Mn 0.3, Zn 0.7, Cu 0.10, Ni 0.05...  
 Be 0.05, Fe 0.05%. The solution was characterized by...  
 dist. and by the following: pH 0.30; acidity 0.50...  
 KOH; iodine no. 0.20; S content 0.05%; chloride (c...

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(2)

*INSTITUTE*

received (I) ... water (II); ... (III); ... (IV); ... (V). The best material was steel (lasting 70-80 days in I, and Mg-1 (no appearance of corrosion after 2 years in I and IV). Steel 1 was the poorest (7-10 days in I and 3). Mg-2 lasted 25 days in I, 100 days in II, and 2 years in IV. Steel 1 and Mg-1 were also attacked in 0.5 and 5.5% in the water. No ... of the only ... in the ... at the ... of ... and ... These ... did not appear for periods as long as ...





MUZGIN, S.S.; ARTAMONOVSKIY, O.Ya.

Loading equipment for the Dzheskagan mine. Inv. AN Kazakh. SSR.  
Ser. gor. dela, met., stroi. i stroimat. no.2:100-108 '57.  
(Mining machinery) (Ore handling) (MLRA 10:9)

MUZGIN, S.S.; ARTAMONOVSKIY, O.Yu.

Bulldozer for underground mining. Inv. AN Kazakh. SSR. Ser. gor  
dela no.2:100-105 '58. (MIRA 12:10)  
(Mining engineering) (Bulldozers)

3/123/61/000/020/033/035  
A004/A101

**AUTHORS:** Musgin, S. S., Artamonovskiy, O. Yu.

**TITLE:** On an expedient type of underground bulldozer

**PERIODICAL:** Referativnyy zhurnal, Mashinostroyeniye, no. 20, 1961, 4, abstract 20Ts38 ("Izv. AN KazSSR. Ser. gorn. dela", 1960, no. 1 [12], 59-64, Kazakh summary)

**TEXT:** The authors describe the BII-1 (BP-1) underground bulldozer (for road levelling, cleaning the floor of mine workings, etc.) with hydraulic frame, developed by the Institute of Mining, AS KazSSR, and the Chelyabinskii zavod dorozhnykh mashin im. Kolyushchenko (Chelyabinsk Plant of Road Machinery) on the base of the C-100 ПП (S-100 GP) tractor. The BP-1 bulldozer can be powered either by a diesel engine or an electromotor. Bulldozers with diesel drive should be equipped with a scrubber of the catalytic type or a scrubber for the wet cleaning of exhaust gas. For operation in dead faces an electric drive is necessary. The weight of the bulldozer with tractor amounts to 14 tons, the length is 5,450 mm, width - 3,250 mm, height - 3,120 mm; power of diesel engine

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On an expedient type of underground bulldozer

S/123/61/000/020/033/035  
A004/A101

- 90 HP, electric drive - 55 kw. It is pointed out that for the haulage of ore, the БП-2 (BP-2) bulldozer has been designed with a horseshoe moldboard. For small-scale work the BP-1 bulldozer can be fitted with a moldboard of the BP-2 type. ✓

I. Paybisovich

[Abstracter's note: Complete translation]

Card 2/2



MUZGIN, S.S.; ARTAMONOVSKIY, O.Yu.

Trailing cable reeling device on self-propelled mining machines.  
Trudy Inst. gor. dela AN Kazakh.SSR 4:115-125 '60.  
(MIRA 13:9)

(Mining machinery--Electric driving)

ARTAMONOVSKIY, O.Yu.

Bulldozers for underground mining operations. Vest. AN Kazakh.  
SSR 16 no.8:101-102 Ag '60. (MIRA 13:9)  
(Bulldozers)

ARTAMONOVSKIY, O. Yu. Cand. Tech. Sci. (diss) "Investigation of  
Work of Bulldozers in Underground Working of Sliding Deposits  
of Solid Ores with Use of Self-Propelled Equipment," Alma-Ata,  
1961, 15 pp (Kazakh Polytech. Inst.) 200 copies (KL Supp 12-61,  
262).

SHARIPOV, Vakhit Sharipovich; MUZGIN, Sergey Spiridonovich; BUREZHANOV, Mukhit Kuldshanovich; KRACHENKO, Arsen Mikhailovich; ARTAMONOVSKIY, Oleg Yur'yevich; KULAKOV, Arkadiy Yakovlevich, Prinsipalni uchastnye; KAZYBEKOV, D.M.; IBBAYEV, Sh.I.; ISTOMIN, S.M., otv.red.; GRYMAN, L.M., red.isd-va; SIFYAGINA, Z.A., red.isd-va; SAL'TSOVSKIY, M.S., red.isd-va; MAKSIMOVA, V.V., tekhn. red.

[Self-propelled machines for underground workings of ore deposits] Samokhodnye mashiny dlia podzemnoi razrabotki rudnykh mestorozhdenii. By V.Sh.Sharipov i dr. Moskva, Gos.nauchno-tekhn.isd-vo lit-ry po gornomu delu, 1961. 258 p.

(Mining machinery)

(MIRA 14:12)

ARTAMONOVSKIY, O.Yu.; MUZGIN, S.S.

Linear stability of underground bulldozers. Trudy Inst.gor.dela  
AN Kazakh.SSR 9:163-170 '62. (MIRA 15:8)  
(Bulldozers)

ARTAMONOVSKIY, O.Yu., inzh.; MUZGIN, S.S., inzh.

Balldoser's moldboard for moving rocks. Stru.i dor.mash. 7  
no.2:20 P '62. (MIRA 15:5)

(Balldozers)

SHARIPOV, V.Sh.; FILIPPOV, V.K.; ARTAMONOVSKIY, G. Yu.

Universal running gear for self-propelled mining machinery.

Trudy Inst. gor. dela AN Kazakh. SSR 13:93-97 '64.

(MIRA 17:7)

... , S.S. ; AKTAMONOVSKIY, G. Yu., GEGIYEV, Yu.P.; YUPATOV, E.V.  
SHOL', G.A.

Investigating an underground bulldozer-loader at the  
Dzhezkazgan Mine. Trudy Inst. gor. dela AN Kazakh.  
SSR 13:98-114 '64.  
(MIRA 17:7)



ARTAMONOVSKIY, O.Yu., kand.tekhn.nauk; MEZGIN, S.S., kand.tekhn.nauk

Effect of a tractor suspension system on the precision control of  
a bulldozer blade. Stroi. i dor. mash. 9 no.12:9-10 D '64.

(MIRA 18:3)

POLAND / Cultivated Plants. Fodders.

M-4

Abs Jour: Ref Zhur-Biol., No 6, 1958, 25112

Author : Bulinski, R., Artamonow, E.

Inst : Not given

Title : The possible Utilization of *Fucus vesiculosus* L.

Orig Pub: Roczn. Panstw. zakl. hig., 1957, 8, No 1, 81-84  
(Pol., res. Russ., Eng.)

Abstract: The possibility is explored of utilizing the brown algae *F. vesiculosus* for livestock fodder. An analysis of the chemical composition of this algae is given, together with the tests on animal feeding. It was established that due to the low assimilability of the thalluses they contain and the presence of toxic substances in them, this species may not be used for feeding purposes.  
-- B. K. Flerov

Card 1/1

100

EXCERPTA MEDICA Sec 17 Vol 5/1 Public Health Jan 59

366. THE EVALUATION OF BACTERIOLOGIC CLEANLINESS OF TABLE-  
SPOONS IN VARIOUS CANTEENS - Ocena czystości bakteriologicznej  
łyżek stołowych w różnych zakładach zbiorowego żywienia - Artamonov  
E. Działu Hig. Żywności i Żywności Woj. Stac. San.-Epid., Lublin-REK 227.  
PANST. ZAKŁ. HIG. (Warsz.) 1958, 9/1 (1-10) Graphs 1 Tables 7 illus. 3

It was observed that the number of bacteria on spoons from the same canteen  
fluctuates markedly; this might be caused by careless washing of spoons or by  
secondary infection after washing (dirty hands, dirty dish towels, improper storage  
of table-ware). Among the microorganisms haemolytic, non-haemolytic staphylo-  
cocci and other Gram-positive cocci prevailed. Neither toxigenic *C. diphtheriae*  
nor microorganisms of acid-resistant type were found. Among haemolytic staphylo-  
cocci a large number of strains resistant to penicillin and other antibiotics was  
found. Using the same method of washing it was observed that smooth spoons were  
infected about 100 times less than those with a distinctly coarse surface.

ARTAMONTSEV, N.Ya.

Pressing anchors designed by the Moscow Institute of Railroad  
Engineers on manually operated presses. Transp. stroi. 10  
no. 12:53 D '60. (MIRA 13:12)

1. Starshiy inzhener Nauchno-issledovatel'skoy sektsii  
Orgtransstroya.  
(Reinforcing bars)

YUMIN, Naganail Aleksandrovich, kand. tekhn. nauk, dots.;  
ARTAMONICHEV, Aleksandr Nikolayevich, kand. tekhn. nauk,  
dots.; MISHINA, Mariya Nikolayevna, kand. tekhn. nauk,  
dots.; RAGOZIN, Boris Kupriyanovich, kand. tekhn. nauk;  
GOLOVNIKOV, V.I., st. nauchn. sotr., kand. tekhn. nauk,  
retsensent; BUCHIN, Ye.D., st. nauchn. sotr., retsentsent;  
REZNICHENKO, U.S., st. prep., retsentsent; POMKINSKIY, L.I.,  
insh., red.; MORALEVICH, O.D., red. iad-va; RIDNAYA, I.V.,  
tekhn. red.

[Organization of river fleet operations] Organizatsiya raboty  
flota; sadachi i raschet. Moskva, Izd-vo "Rechnoy transport,"  
1960. 212 p. (MIRA 16:8)

1. Zaveduyushchiy kafedroy "Organizatsiya raboty flota i  
portov" Novosibirskogo instituta inzhenerov vodnogo transporta  
(for Yumin).

(Inland water transportation)

VAL'KOV, Grigoriy Petrovich. Prinsipialni uchastiye: KAZAKOV, A.P.,  
kand. tekhn. nauk, dots.; GNOYAN, A.A., inzh.; MOHOZOV,  
N.P., inzh.; ARTAMONYCHEV, A.N., kand. tekhn. nauk,  
retsensent; MARPENIN, N.V., inzh., retsensent; RZHECHITSKIY,  
B.D., red.; MAKRUSHINA, A.N., red.

[Organisation of cargo handling; problems and examples] Orga-  
nizatsiya gruzovykh rabot; zadachi i primery. Moskva,  
Transport, 1965. 299 p. (MIRA 18:6)

ZAIIKA, Viktor Yevgen'yevich; GALAZIY, G.I., otv. red.;  
ARTAMOSHIN, A.S. red.

[Parasites of fishes in Lake Baikal] Parazitofauna ryb ozera  
Baikal. Moskva, Nauka, 1965. 105 p. (MIRA 18:6)

ARENFT, A.A., prof.; ARTANYAN, A.A., kand.med.nauk

Changes in cerebrospinal fluid circulation following surgical  
intervention in connection with tumors of the cerebellum. Probl.  
sovr.neirokhir. 4:114-20 '62. (MIRA 16:2)  
(CEREBELLUM--TUMORS) (CEREBROSPINAL FLUID)



ARTARYAN, A.A., kand. med. nauk

Method of surgical operation in tumors of the cerebellum and the fourth ventricle (exclusion of the lower posterior cerebellar artery). Vop. neurokhir. 28 no.1:44-49 Ja-F '64.

(MIRA 18:1)

1. Nauchno-issledovatel'skiy ordena Trudovogo Krasnogo Znameni institut neyrokhirurgii imeni N.N. Burdenko (direktor - prof. B.G. Yegorov) AMN SSSR i kafedra neyrokhirurgii (zav. prof. A.A. Arendt) Tsentral'nogo instituta usovershenstvovaniya vrachey, Moskva.

MAREYEVA, T.G.; ROSTOTSKAYA, V.I.; ARTYANYAN, A.A.

Some modifications of subdural plastic surgery on internal osseous defects in anterior cerebral hernia. Vop.neirokhir. 28 no.4:48-50  
Jl-Ag '64. (MIRA 18:3)

1. Nauchno-issledovatel'skiy ordena Trudovogo Krasnogo Znameni  
institut neyrokhirurgii imeni Bardenko (dir. - prof. A.I.  
Artyanov) SMI SSSR i kafedra neyrokhirurgii (zav. - prof. A.A.  
Arendt) Tsentral'nogo instituta usovershenstvovaniya vrachey,  
Moskva.

AETAMONTSEVA, M. D.

"Coordinates of the Coal-Bearing Deposits of the Kuzbass." *Grand Geol-Min Sci. Tomsk Order of Labor Red Banner Polytechnic Inst imeni S. M. Kirov, Min Higher Education USSR, Tomsk 1954.*  
(KL, No 1, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR  
Higher Educational Institutions (12)  
SO: *Sun. No 556, 24 Jun 55*

ARTAMONYCHEV, A.; KHAKHIN, N.

Efficient methods for fixing towlines on rafts. Rech. transp.,  
19 no. 6:15-17 Je '60. (MIRA 14:2)  
(Towing) (Rafts)

ARTAMONYCHEV, A., kand.tekhn.nauk; SOROKIN, M., Inzh.

Improve methods of transporting crated piece cargoes and lumber  
on Siberian rivers. Rech.transp 21 no.4:9-12 Ap '62.

(MIRA 15:4)

(~~SIN~~ Inland water transportation) (Cargo handling)

ARTAMONYCHEV, A. N. Cand Tech Sci -- (diss) "On the problem of ~~the increasing~~  
~~the productivity of raft traction.~~" *the productivity of raft traction.* Gor'kiy, 1957. 13 pp (Min of the River  
~~of tractional productivity of rafts.~~ Fleet RSPSR. Gor'kiy Inst of Engineers of Water Transport. Chair of  
Organization of Traffic ), 100 copies (KL, 5-58, 101)

ARTAMONYCHEV, A.N., inzhener.

Calculating ~~own~~ speed of raft movements on reservoirs. Rech.  
transp. 16 no.4:5-7 Ap '57. (MLRA 10:5)  
(Towing) (Inland navigation)

ARTAMOYCHEV, A.; GARINOV, K.; STOROZHEV, N.

Use of sectional barge trains on Siberian rivers. Mech.  
transp. 19 no.7:12-15 J1 '60. (MIRA 13:8)  
(Siberia--Rivers) (Towing)



ANTONOVICH, A.N., kand. tekhn. nauk, dotsent; YUMIN, N.A., kand.  
tekhn. nauk, dotsent, otv. red.

[Problems in the operation of the fleet and ports.] Voprosy  
ekspluatatsii flota i portov. Moskva, Transport, 1965. 45 p.  
(Novosibirsk. Institut inzhenerov vodnogo transporta. Trudy,  
no.19). (MIRA 19:1)

ARTAMOSHIN, S.I., inzh.

Using slag concrete made of agglomerated slag in producing  
wall blocks. Stroi. prom. 36 no. 7: 3 of cover J1 '58, (MIRA 1118)

1. Mosoblstroytsenil.

(Slag)

(Concrete blocks)

ARTAMOSHIN, Yu.N., polkovnik

Troop masses must study the historic decisions of the party congress.  
Vest.protiivozd.obor. no.12:7-9 D '61. (MIRA 15:3)  
(Russia--Armed forces--Political activity)

1.1100

33806

B/137/62/000/001/062/237  
A060/A101

AUTHOR: Artamov, A. Ya.

TITLE: Mechanical working of metallo-ceramic antifriction materials by cutting

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 1, 1962, 40, abstract 10302 ("Porozhk. metallurgiya", 1961, no. 3, 63-74, English summary)

TEXT: An investigation was carried out upon the influence of the parameters of the cutting schedule (feed 0.03 - 0.24 mm/rev, cutting depth 0.1 - 0.4 mm, speed 30 - 300 m/min) and the geometry of the cutting tool (rake angle from -15° to +15°, chamfer radius of cutting edges 0 - 3 mm) upon the gas-permeability, wear, and surface purity of iron-graphite metallo-ceramic materials with porosity of 10 - 35%. The gas-permeability of porous specimens deteriorates as the rake angle and the feed are decreased, and as the edge-chamfer radius, cutting rate and depth are increased. As result of these experiments schedules were worked out for "contractile" and "non-contractile" cutting. In the first case the gas-permeability deteriorates by a factor of 10 as compared with untreated parts, in the second case the gas-permeability is almost unchanged, but the

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33806

S/137/62/000/001/062/237  
A06Q/A101

Mechanical working of metallo-ceramic ...

working purity is lower by 1 - 2 classes. The results of measuring the wear-resistance and the coefficient of friction of the specimens after calibration and after various working schedules are cited. The wear-resistance of specimens treated according to the "contractile" schedule increases by a factor of 7.5.

R. Andriyevskiy

[Abstracter's note: Complete translation]

Card 2/2

577. ~~GRAND INTERNATIONAL POLICE FORCE~~ Aptanov, I. (Nivios Mica,  
10 INF. 1984, 77. (C))

KRAPIVITSEVA, S.I.; GALETSKAYA, O.I.; ARTAMOV, V.N.; MALINSKAYA, N.N.

Functional state of the motor analyzer and of the cardiovascular system as an indication of the degree of physical training of juveniles and as a basis for setting up the pattern for the first year of industrial education. Uch. zap. Mosk. nauch.-issl. inst. san. i gig. no. 2:33-36 '59. (MIRA 16#11)

1. Institut gigiyeny truda i professional'nykh zabolevaniy AMN SSSR i Moskovskiy nauchno-issledovatel'skiy institut sanitarii i gigiyeny imeni P.F. Erismana.

\*

"APPROVED FOR RELEASE: 09/24/2001

CIA-RDP86-00513R000102220005-9

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CIA-RDP86-00513R000102220005-9"



IVANOV, M.N., doktor tekhn.nauk, prof.; SHUVALOV, S.A., kand.tekhn.nauk,  
dotsent; ARTANOV, A.K., ~~inzh.~~

Undulating gears. Izv.vys.ucheb.zav.; mashinostr. no.8:53-69  
'63. (MIRA 16:11)

1. Moskovskoye vysshaye tekhnicheskoye uchilishche imeni Baumana.

Electrical Engineering

Dissertation: "An Investigation of a Synchronous Motor With a Mechanical Rectifier."  
Cand Tech Sci, Sci Res Inst, Ministry of Electric Power Stations and the Electrical  
Industry USSR, 11 Mar 54. (Vechnyaya Moskva Moscow, 1 Mar 54)

SO: SUM 213, 20 Sep 1954

ARTANOV, S. G.

"Investigation of a Synchronous Motor with a Mechanical Rectifier,"

Dissertation for the Degree of Candidate of Technical Sciences, defended at  
Scientific Research Institute of Electrotechnical Industry, 11 March 1954,  
(Elektrichestvo, 1958, Nr 4, pp 87-88)

KUZNETSOV, B.I., inzh.; ARTANOV, S.G., kand.tekhn.nauk; ORZHAKHOVSKIY,  
M.L., inzh.

Principal factors determining the reliability of electrical  
machines. Vest. elektroprom. 33 no.9:57-62 8 '62. (NIRA 15:10)  
(Electric machinery)

ARTANOV, S.G., kand. tekhn. nauk

Measurement of dimensions and economic efficiency indices  
of synchronous and asynchronous machines with aluminum  
windings. Elektrotehnika 35 no.1:29-36 Ja '64.  
(MIRA 17:2)

L 39682-66 EWT(d)/EWT(1)/EWP(v)/EWP(k)/EWP(h)/EWP(l) 0D-2  
ACC NR: AP6009502 (A) SOURCE CODE: UR/0105/66/000/003/0013/0018

AUTHOR: Artanov, S. G. (Candidate of technical sciences)

13  
12  
B

ORG: VNIEM

TITLE: Determining optimal size of electrical machinery

SOURCE: Elektrichestvo, no. 3, 1966, 13-18

TOPIC TAGS: electric machinery, induction motor, electric machine design

ABSTRACT: In the classical Widmar method of electric-machine design, the fundamental dimensions and relations (stator diameters, stator length, tooth-to-slot ratio, slot height-to-width ratio, etc.) are specified as initial; hence, the method does not guarantee the best utilization of materials. A new procedure for electric-machine design is suggested in which these quantities are used as initial data (for induction motors): power, voltage, rpm, maximum torque ratio, class

Card 1/2

UDC: 621.313.04

ACC NR: AP6009502

and thickness of insulation, number of slots, airgap, stator induction, winding current density. Formulas are developed which permit calculating: slot dimensions, tooth width, yoke thickness, stator core diameters, core length. The method has been used in practice for designing a new series of 100 to 1000 kw induction motors. Other sets of formulas can be developed for other types of electric machinery. Other machine parameters can be determined by using conventional methods. Orig. art. has: 75 formulas.

SUB CODE: 09 / SUBM DATE: 20Jul65 / ORIG REF: 003

Card 2/2

1075

**ARTANOV, V.M.**

Efforts to achieve technological progress. Leg. prom. 15 no.4:  
29-30 Ap '55. (MIRA 8:7)

1. Sekretar' partiynogo byuro shveytsnoy fabriki imeni K.TSetkin.  
(Clothing industry)



ARTANOVA, A.K.

Method of forecasting the average winter temperature in distant  
pastures of the Northern Caucasus. Meteor. i gidrol. no. 12:26-29  
D '62. (MIRA 15:12)

1. Tsentral'nyy institut prognozov.  
(Caucasus, Northern—Temperature)

ARTANOVA, A.K.

Aridity of the western coasts of continents in tropical  
and subtropical latitudes. Vest. Mosk. un. Ser. 5:Geog. 18  
no.5:75-78 8-0 '63. (MIRA 16:11)

ARTANOVSKIY, Yu.

State purchasing prices and flax quality. Vop. ekon.  
no.10:142-146 0 '62. (MIRA 15:11)  
(Flax--Prices)

ARTANOVA, A.K.

Specific features of the wind regime in the southwestern part of  
the North Pacific during the first (25th) cruise of the "Vityaz"  
Trudy Inst. okom. 40:29-39 '60. (MIRA 14:18)

(Pacific Ocean--Winds)

Adams, R. S.

Tubercular affection of bones of the cranial vault. Vop. neirohir. 16 no. 4,  
1952.

SO: MLRA, November 1952

ARTARYAN, A. A., Card Med Sci -- (diss) "Blood supply of the cerebellum  
damaged by ~~the~~ tumor." Mos, 1958. 12 pp (Min of Health USSR, Central Inst  
for Advanced Training of Physicians), 200 copies (KL, 16-58, 125)

- 94 -

ARTARYAN, A.A., kand.med.nauk (Moskva)

Blood supply of neuroectodermal tumors of the cerebellum. Vop.  
neirokhir. 25 no.1:49-52 Ja '61. (MIRA 1482)

1. Kafedra neyrokhirurgii Tsentral'nogo instituta usovershenstvovaniya vrachey i Institut neyrokhirurgii imeni akad. N.N. Burdenko AMN SSSR.

(BRAIN--TUMORS)

KUZNICHENKO, A.P.; ARTASVICH, L.A.

Device for continuous controlling of moisture in the porcelain batch.  
Stek.l ker. 17 no.3:36-37 Mr '60. (MIRA 13:6)  
(Porcelain)



107-57-3-45/64

**AUTHOR:** Artashov, A. (Cherepovets)

**TITLE:** Locating Short Circuits in Variable Capacitors. Experience exchange  
(Opredeleniye mesta zamkaniya v kondensatorakh peremennoy yemkosti.  
Obmen opytom)

**PERIODICAL:** Radio, 1957, Nr 3, p 41 (USSR)

**ABSTRACT:** A conventional lighting bulb should be connected in series with the variable capacitor being tested and supplied from a wall outlet. The bulb will flash, and the exact place of short circuit will be revealed by sparking.

Card 1/1

ARTASOV, A.I.

Accuracy of determining coordinates and heights of points  
in gravity surveys. Geofis. razved. no.11:107-117 '63.  
(Gravity anomalies) (MIRA 16:8)

"Problema yedinstva i mnozhestvennosti kul'tur v sovremennoy etnografii."

report submitted for 7th Intl Cong, Anthropological & Ethnological Sciences,  
Moscow, 3-10 Aug 64.

ARENDE, A.A., prof.; ARTARYAN, A.A., kand. med. nauk; BAIROV, G.A., prof.;  
VOLKOV, M.V., prof.; VARSHAVSKAYA, D.Ya., kand. med. nauk;  
VOROKHOBOV, L.A.; GEBERALOV, A.I., kand. med. nauk;  
DANIYEL'BEK, K.V., kand. med. nauk; DERZHAVIN, V.M., kand.  
med. nauk; DOLETSKIY, S.Ya., prof.; YERHOLIN, V.N.; ZATSEPIN,  
S.T., kand. med. nauk; ZVYAGINTSEV, A.Ye., dots.; ISAKOV, Yu.F.,  
doktor med. nauk; KOZYREV, V.A., kand. med. nauk; KONCVALOV,  
A.N.; KORNYSANSKIY, G.P., prof.; KLIMANSKIY, V.A., kand. med.  
nauk; KLIMKOVICH, I.G., dots.; KONERASHIN, N.I., kand. med.  
nauk LEVINA, O.Ya., kand. med. nauk; LENYUSHKIN, A.I., kand.  
med. nauk; LEYBZON, N.D., doktor med. nauk; MALININA, L.I.,  
doktor med. nauk; MAREYEVA, T.G., kandidat meditsinskikh  
nauk; NERSESYANTS, S.I., kand. med. nauk; OVCHINNIKOV, A.A.;  
OGLEZNEV, K.Ya., kand. med. nauk; KOSTOTSKAYA, V.I., kand.  
med. nauk; STEPANOV, E.A., kand. med. nauk; BPSHTEYN, P.V.;  
OSTROVERKHOV, G.Ye., prof., glav. red.; DOMBROVSKAYA, Yu.F.,  
prof., otv. red.

[Multivolume manual on pediatrics] Mnogotomnoe rukovodstvo po  
pediatrii. Moskva, Meditsina. Vol.9. [Pediatric surgery] Khir-  
urgiya detskogo vozrasta. Red. toma S.I.A. Doletskii. 1964. 654 p.

(MIRA 17:9)  
1. Deystvitel'nyy chlen AMN SSSR (for Dombrovskaya). 2. Chlen-  
korrespondent AMN SSSR (for Bairov, Volkov).

ARTAZOV, S. (g. Sukhumi)

Seven years without damages and incidents. Crash, av. 13 no. 5:  
13 Ny '56. (MIRA 9:9)

1. Zamestitel' komandira podrasdeleniya po politchnosti.  
(Aeronautics, Commercial)

ARTBAUER, J.

A bushing for a 220-kv. transformer. p. 526.

Vol. 44, no. 10, Oct. 1955  
ELEKTROTECHNICKY OZOR  
Praha, Czechoslovakia

Source: East European Accession List. Library of Congress  
Vol. 5, No. 8, August 1956

ARTEBAUER, J.

Discharges in condenser type insulations.

P. 559. (ELEKTROTECHNICKY OBZOR) (Praha, Czechoslovakia) Vol. 3, no. 20, Dec. 1957

SO: Monthly Index of East European Accession (EEAI) LC Vol. 7, No. 5, May, 1958

ARTBAUER, J.

Measuring dielectric losses of insulating oils. p. 87.  
(Elektrotechnik, Vol. 12, no. 3, March 1957. Praha, Czechoslovakia)

SO: Monthly List of East European Accessions. (EEAL) IC. Vol. 6, No. 6,  
June 1957. Uncl.



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1101 1101 1101

Electric aging characteristics of high-voltage, epoxy-resin bonded paper insulation with condenser insulator. In: *Acta Technica (Vysoký napětí, Brno, Czechia)*, 1968, vol. 47, p. 115-116, 118, 119, in Slovak. -- Aging of the paper insulation is caused by ionization of gases in pores within the paper. Complete breakdown of the insulator depends on the ionization energy and time of exposure. Alexej B. Bozkovic

ARTBAUER J. ; MACHU V. ; SEDOVIC

Discussion of Kolar's article on thermal resistance of insulators and systems;  
also, remarks by L. Kolar, p. 436.

ELEKTROTECHNICKY, OBZOR. Praha, Czechoslovakia. Vol. 48. no. 8. Aug. 1959.

Monthly list of East European Accessions (EEAI) LC, Vol. 9, no. 2, Feb. 1960  
Uncl.

**AUTHOR:** Jan Artbauer

**TITLE:** "Determination of the Resistance of Insulating Substances to Discharges"

**SOURCE:** Prague, Elektrotechnicky Obzor, Vol L, No 8, (Aug 61) p 409-412

**DESCRIPTION:** The article gives an outline of the general problem of electric discharges on the surface of insulating substances, and the overall problem to determine their resistance to the discharge, the efforts of the Electrical Research Association and of the French Central Laboratory of Electric Industries. The part of particular interest is the evaluation of the proposed methods of determination, and the present status in Czechoslovakia.

S/196/62/000/015/001/008  
E194/E155

**AUTHORS:** Artbauer, J., and Griač, J.  
**TITLE:** An electric strength test procedure for sheet insulating materials

**PERIODICAL:** Referativnyy zhurnal, Elektrotehnika i energetika, no.15, 1962, 7, abstract 15 B 58. (Bull. VUKI, v.14, no.5, 1961, 225-234). (Slovak, abstracts in English and Russian)

**TEXT:** The ability to resist discharge was determined in a practically uniform field set up between two plane electrodes with rounded edges. About 0.5 mm separated the upper electrode and the sheet specimen. The functional relationship was determined between the applied voltage and the time to breakdown when corona acted on the specimen. A removable cap kept the specimen and electrodes from direct contact with the ambient air. The curve of breakdown voltage as a function of corona application time was a drooping one. Because of the considerable scatter of results, the mean breakdown voltage was determined statistically from



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Card 1/2

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Z/017/62/051/004/001/001  
D291/D302

AUTHORS: Artbauer, Ján, Engineer, Candidate of Technical Sciences,  
and Griac, Juraj, Physicist

TITLE: A method to determine the resistance of insulators against  
discharges

PERIODICAL: Elektrotechnický obzor, v. 51, no. 4, 1962, 156-161

TEXT: The article, predominantly based on Western sources, describes a novel, advantageous and convenient method to determine the discharge resistance of insulating materials. This method which eliminates the disadvantages of conventional test methods and better meets practical requirements, uses flat specimens placed between electrodes which produce a nearly homogeneous electric field perpendicular to the specimen surface. These specimens are subjected to electrical discharges at different voltages, and the time ( $t_{pr}$ ) is measured which elapses until breakdown. After a general description of corona properties of insulating materials, and discussing the circumstances, under which a dielectric breakdown occurs

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Z/017/62/051/004/001/001  
D291/D302

A method to determine the ...

and possibilities of reducing breakdown tests, the authors give a detailed description of the development and final version of the novel test method. The insulator specimens are prepared in form of 3 mm thick plates, measuring at least 60 x 60 mm. The discharge electrodes are flat, symmetrically arranged on both sides of the specimen. The grounded electrode, embedded in a dielectric material, directly supports the specimen, the air gap between the voltage electrode and the specimen surface is 0.50 mm. The latter electrode is covered by a glass-fiber cup which is pressed against the specimen by a spring. The glass-fiber cover is used to maintain the concentration of ozone, originating during discharges, at a constant value, and a 0.5 mm vent, drilled into the cup, avoids under-pressure in the closed system which, otherwise, causes deformation of the specimen plate. The time which elapses until breakdown must be measured at least at three different discharge voltages, carefully chosen within the range of originating ionization till spontaneous breakdown. Regarding extrapolation of obtained values, it is recommended starting the tests at a lower voltage which is gradually increased (1 hr intervals) till

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A method to determine the ...

Z/017/62/051/004/001/001  
D201/D302

breakdown occurs. In the experiments, described in the article, an arrangement was used where 10 electrode pairs were mounted on a common frame, so that 10 specimens could be tested simultaneously. The lowest discharge resistance was observed in polytetrafluoroethylene (teflon); however, also insulating materials with higher discharge resistance produced rather unsatisfactory results. Largely differing test values may possibly be attributed to chemical changes of the specimen surface. In conclusion, the authors state that insulator discharge-resistance tests are rather difficult, and that the described method can be considered only the first step toward solving the variety of problems involved. (Technical Editor: Doctor Engineer V. Chûra). There are 7 figures and 15 references, 3 Soviet-bloc and 12 non-Soviet-bloc. The references to the 4 most recent English-language publications read as follows: C.D. Nail: Corona discharge - the failing of dielectrics. *Electronic Industries* (1958), Sept., pp 74-77; J.H. Mason: Dielectric breakdown in solid insulation. V "Progress in dielectrics", vol. I, 1959; J.H. Mason: The resistance of sheet insulation to surface discharges. *Proc. IRE* 107 (1960), pp 551-568; G.F. Lang: Ionization problems in large rotating machines.

Card 3/4



A method to determine the ...

Z/017/82/051/004/001/001  
D291/D302

Insulation (1960), Dec., pp 21-26.

SUBMITTED: August 12, 1961

✓

Card 4/4

ACC NR: AP6020618

SOURCE CODE: CZ/0042/65/000/009/0560/0564

AUTHOR: Artbauer, Jan (Candidate of sciences; Engineer); Griac, Juraj (Graduate physicist) 43 B

ORG: Research Institute of Cables and Insulators, Bratislava (Vy-kumny ustav kablov a izolantov)

TITLE: Influence of cross-linking and of admixtures on the intrinsic electric strength of ethylene-propylene copolymer

SOURCE: Elektrotechnicky casopis, no. 9, 1965, 560-564

TOPIC TAGS: admixture, copolymer, polymer cross linking, electric property

ABSTRACT: The article describes experiments conducted to determine the influence of cross-linking and of admixtures (dicumyl peroxide, Peroximon, sulfur, kaolin, CaCO<sub>3</sub>, ZnO and stearic acid) on the intrinsic electric strength of ethylene-propylene copolymer. The method and results are presented. The authors thank Engineer R. Rado, Candidate of Sciences, for consultations on the experiment and comments on the use of copolymers. [JPRS]

SUB CODE: 07, 20, 11 / SUBM DATE: none / ORIG REF: 003 / OTH REF: 005

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ARTBAUER, O.

A contribution to the discussion of Z. Radl's article "Temperature Rise of  
Iron Fittings around Conductors for Strong Alternating Currents." p. 353.

(Elektrotechnický Obzor. Vol. 46, no. 7, July 1957. Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (KEAL) LC, Vol. 6, no. 10, October 1957. Uncl.

Z/042/61/000/010/003/003  
E197/E435

**AUTHOR:** Artbauer, Otto

**TITLE:** Short period temperature rise of isolated or submerged conductors which simultaneously conduct heat lengthwise

**PERIODICAL:** Elektrotechnický časopis, no.10, 1961, 640-647

**TEXT:** The purpose of the author is to determine conditions under which the effect of cooling at the surface of conductors heated for short periods can be neglected and only heat conduction along the conductor need be considered. The author refers to the case when a heavy current will cause temperature rise in a portion of a circuit, say during short circuit, and states that while an exact solution is possible for obtaining the temperature of the conductor under conditions of heat transfer through the surface to the surroundings, the formula is far too complicated and substitutes the case when conduction takes place along the conductor only. In the case of an insulated conductor, it is postulated that: the temperature across the conductor's cross-section will be uniform; the heat conducted by the insulation in the axial direction will be relatively small if the thermal conductivity of the insulator is about hundred times smaller than  
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