KOZLOV, D. (I.), Col

Author of article, "Conducting Small Arms Fire on Airplanes." Voyennyy Vestnik, Moscow, No 8, Aug 54

SO: SUM 291, 2 Dec 1954

KOZLOV, D., podpolkovnik.

Night firing. Voen. vest. 35 no.8:37-39 Ag '55. (MIRA 11:3)
(Rifle practice)

KOZLOV, D., podpolkovnik.

Exercises in marksmanship training. Voen.vest. 36 no.11: 27-32 N '56. (MLRA 10:2)

(Shooting, Military)

KOZLOV, Dmitriy Iosifovich, polkovnik; VIL'CHINSKIY, I.K., polkovnik, red.; BUKOVSKAYA, N.A., tekhn.red.

[Teaching how to shoot moving targets] Obuchenie strel'be po dvizhushchimsia tseliam. Moskva, Voen.izd-vo M-va obor.SSSR, 1960. 73 p. (MIRA 14:1)

(Shooting, Military)

NIKITENKO, I., polkovnik; KOZLOV, D., polkovnik

Training grenade throwers. Voen. vest. 39 no. 1:64-70 Ja '60.
(MIRA 14:2)

(Grenades)

KOZLOV, D., polkovnik

A training exercise. Starsh. serzh. no.1:16 Ja '62. (MIRA 15:4)
(Shooting, Military)

KOZLOV, D., polkovnik

Small arms fire on aerial targets. Voen. vest. 42 no.7:97-100 Jl '62. (MIRA 15:6)
(Shooting, Military) (Antiaircraft guns)

S/018/63/000/001/002/003
A004/A126

AUTHOR: Kozlov, D., Colonel

TITLE: Firing practice at aerial targets

PERIODICAL: Voyennyy vestnik, no. 1, 1963, 113 - 116

TEXT: The author points out that good results in firing practice with infantry weapons at fast flying aircraft are attained if the firing is carried out by whole sub-units which are well-trained. He enumerates the most essential points that have to be considered in training the troops, such as terms determining the position of aerial targets in space and the nature of their flight, identification of aircraft types according to their special characteristics, determining the flight altitude and the distance to the flying target, etc. He then comments in detail on the technique of firing at aerial targets with carbines, sub-machine guns and light machine guns, and emphasizes the necessity of continuous training in this respect.

Card 1/1

YENIKEYEV, Kh.M.; KOZLOV, D.N.; KRUZHILIN, M.P.; MEZHUYEV, B.N.; NALCHAN, A.G.; NIKULIN, A.I.; PANKIN, V.A.; SHAVIN, G.F.; LESNICHENKO, I.I., red. izd-va; SMIRNOVA, G.V., tekhn. red.

[Metal-cutting machines; kinematic adjustment of metal-cutting machines] Metallorezhushchie stanki; kinematicheskaia nastroika metallorezhushchikh stankov. Pod red. A.G.Nalchana. Moskva, Mashgiz, 1962. 179 p. (MIRA 16:2)

1. Moscow. Vsesoyuznyy zaochnyy mashinostroitel'nyy institut. Kafedra "Metallorezhushchie stanki i instrumenty." 2. Prepodavateli kafedry "Metallorezhushchiye stanki i instrumenty" Vsesoyuznogo Zaochnogo Mashinostroitel'nogo instituta (for all except Lesnichenko, Smirnova).
(Metal cutting) (Machinery, Kinematics of)

KOZLOV, D. N., KRIVOUKHOV, V. A., B. E. BRUSHTEIN, S. V. EGOROV

Vysokoskorostnoe rezanie metallov reztsami KBEK. (Vestn Mash., 1948, no. 12, p. 37-42)

KBEK: initials of the inventors and authors of this article.

Super high-speed metal-cutting with KBEK Cutters.

DLC: TN4.V4

SO:: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953

KOZLOV, D. N.

Vnedrenie skorostnogo rezaniia metallov. (Vestn. Mash., 1949, no. 6, p. 43-49)

Introducing high-speed metal-cutting.)

DCL: TN4.V4

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

KOZLOV, D. N.

Rapid methods of treating metals in shipyards. Moskva, Morskoi transport, 1951. 186 p. (53-29907)

VM147.K65

KOZLOV, D. N.

Technology

Booklet for the milling machine operator in a ship-repair plant.
Moscow, "Morskoi transport", 1952

Monthly List of Russian Accessions, Library of Congress, June 1953, Uncl.

KOVLOV, D. N.

Pamiatka sverlovshchiku sudoremontnogo zavoda [Instructions for drill operators in ship-repair yards]. Moskva, Vodtransizdat, 1953. 36 p.

SO: Monthly List of Russian Accessions, Vol. 6 No. 11 February 1954

KOZLOV, D. N.

Pamiatka tokariu sudoremontnogo zavoda [Instructions for lathe hands in ship-repair yards] Moskva, Vodtransizdat, 1953. 52 p.

SO: Monthly List of Russian Accessions, Vol. 6 No. 11 February 1954

KOZLOV, Dmitriy Nikitin, kandidat tekhnicheskikh nauk, dotsent; SPIRIDONOV, V.A., redaktor; ALEKSANDROV, L.A., redaktor; VOLKOVA, Ye., tekhnicheskiy redaktor

[Repair of equipment in ship repairing enterprises] Remont oborudovaniia sudoremontnykh predpriiatii. Moskva, Izd-vo "Morskoi transport," 1955. 462 p. (MLRA 9:4)
(Shipyards)

KARATYGIN, A.M., kand.tekhn.nauk, dotsent; KOZLOV, D.N., kand.tekhn.nauk, dotsent

High-speed boring of cast iron and steel in a heated state. Nauch. trudy MPI no.7/8:49-61 '58. (MIRA 14:12)
(Drilling and boring)

KOZLOV, D.P.

Study of the helminths of animals belonging to the family Canidae of the Far East. Trudy Gel'm. lab. 13:56-74 '63
(MIRA 17:3)

First case of the discovery of Thelazia callipaeda Raillet et Henry, 1910, in man in the U.S.S.R. Ibid.:75-77

Study on the biology of Thelazia callipaeda Bailliet et Henry, 1910. Ibid.: 330-346

SULTANOV, M.A.; RYZHIKOV, K.M., KOZLOV, D.P.

Nematode parasites of wild birds of the Amu Darya estuary. Uzb. biol.zhur. no.1:58-63 '60. (MIRA 13:6)

1. Gel'mintologicheskaya laboratoriya AN SSSR.
(PARASITES--BIRDS) (AMU DARYA VALLEY--NEMATODA)

RYZHIKOV, K.M., KOZLOV, D.P.

Tetrameres cygni, a new nematode from swans of Yakutia. Trudy Gel'm. lab. 10:188-191 '60. (MIRA 13:7)
(Yakutia--Nematoda) (Parasites--Swans)

KOZLOV, D.P.

Detection of Echinococcus and Alveococcus in animals of the family Canidae in Khabarovsk Territory and Kamchatka. Trudy Gel'm.lab. 11:122-125 '61. (MIRA 15:12)
(Khabarovsk Territory--Tapeworms) (Kamchatka--Tapeworms)

KOZLOV, D.P.; KONTRIMAVICHUS, V.L. [Kontrimavicius, V.L.]

Distribution of trichinelliasis in wild and domestic carnivorous animals in some regions of the Far East. Trudy Gel'm.lab. 11:126-129 '61. (MIRA 15:12)
(Soviet Far East--Trichina and trichinosis--Host animals)

SPASSKIY, A.A.; KOZLOV, D.P.

Work of the Kamchatka Helminthological Expedition (317th All-Union Helminthological Expedition) in 1959-1960. Trudy Gel'm. lab. 11:432-434 '61. (MIRA 15:12)
(Kamchatka—Worms, Intestinal and parasitic)

KOZLOV, D.P.

Deciphering the developmental cycle of the nematode Thelazia callipaeda parasitic in the eye of man and carnivorous mammals. Dokl. AN SSSR 142 no.3:732-733 Ja '62. (MIRA 15:1)

1. Laboratoriya gel'mintologii AN SSSR. Predstavleno akademikom K.I.Skryabinym.
(KHABAROVSK TERRITORY--NEMATODA) (EYE--DISEASES AND DEFECTS)

KALININA, Vera Petrovna;KOZLOV, Dmitriy Petrovich; BELOTELOVA, M.V., otv. red.; KOKOSOV, L.V., red.; MARKOCH, K.G., tekhn. red.

[Electrician of municipal telephone exchanges]Monter gorodskikh telefonnykh stantsii. Moskva, Sviaz'izdat, 1962. 205 p. (MIRA 15:11)

(Telephone--Handbooks, manuals, etc.)

KOZLOV, D.P.; OVSYUKOVA, N.I.; RADKEVICH, Zh.F.

A new species of nematodes Cylicospirura skrjabini (Spirurata) from arctic foxes and common foxes. Trudy Gel'm. lab. 17:105-109 '64.
(MIRA 17:10)

ANASTASIYEV, B.I., inzh.; YEREMIN, V.M., inzh.; KOZLOV, D.T., inzh.; MIROV, B.M., inzh.; SAPOZHNIKOV, V.A., inzh.; ROMANOV, V.G., inzh.

Automatic unit for measuring pipe length. Mekh. i avtom.proizv. 19 no.3:7-9 Mr '65. (MIRA 18:4)

VLASOVA, K.N.; NOSOVA, L.A.; KOZLOV, D.V.; PLATONOV, V.F.

Use of polyamides in the friction parts of motor vehicles. Plast. massy no.1:38-46 '61. (MIRA 14:2)
(Motor vehicles) (Polyamides)
(Bearings (Machinery))

SEREBRYANYY, S.B.; KOZLOV, E.A.; NEPLYUYEV, V.M.

Terminal groups of polyhedric protein formed on infecting the mulberry silkworm with nuclear polyhedrosis virus. (Borrelinavirus bombycis). Ukr. khim. zhur. 29 no.2:177-180 '63. (MIRA 16:6)

1. Institut organicheskoy khimii AN UkrSSR.
(Proteins) (Virus research)

KOZLOV, E.A.; SHEVCHUK, G.N.; SEREBRYANYY, S.B.

Qualitative and quantitative determination of amino acids in distiller's molasses wastes. Ukr. khim. zhur. 29 no.4:453-458 '63. (MIRA 16:6)

1. Institut organicheskoy khimii AN UkrSSR i Ukrainskiy nauchno-issledovatel'skiy institut spirtovoy promyshlennosti.
(Distilling industries—By-products)
(Amino acids)

LEVCHENKO, Ye.S.; KOZLOV, E.S.; KIRSANOV, A.V.

N-carbethoxyareneimino sulfonyl chlorides. Zhur.ob.khim. 31 no.7: 2381-2385 Jl '61. (MIRA 14:7)

1. Institut organicheskoy khimii AN Ukrainskoy SSR.
(Sulfonyl chlorides)

LEVCHENKO, Ye.S.; KOZLOV, E.S.; KIRSANOV, A.V.

Esters of N-carbethoxyareneiminosulfonic acids. Zhur.ob.khim. 32 no.3:882-886 Mr '62. (MIRA 15:3)

1. Institut organicheskoy khimii AN Ukrainskoy SSR.
(Sulfonic acids)

LEVCHENKO, Ye.S.; KOZLOV, E.S.; KIRSANOV, A.V.

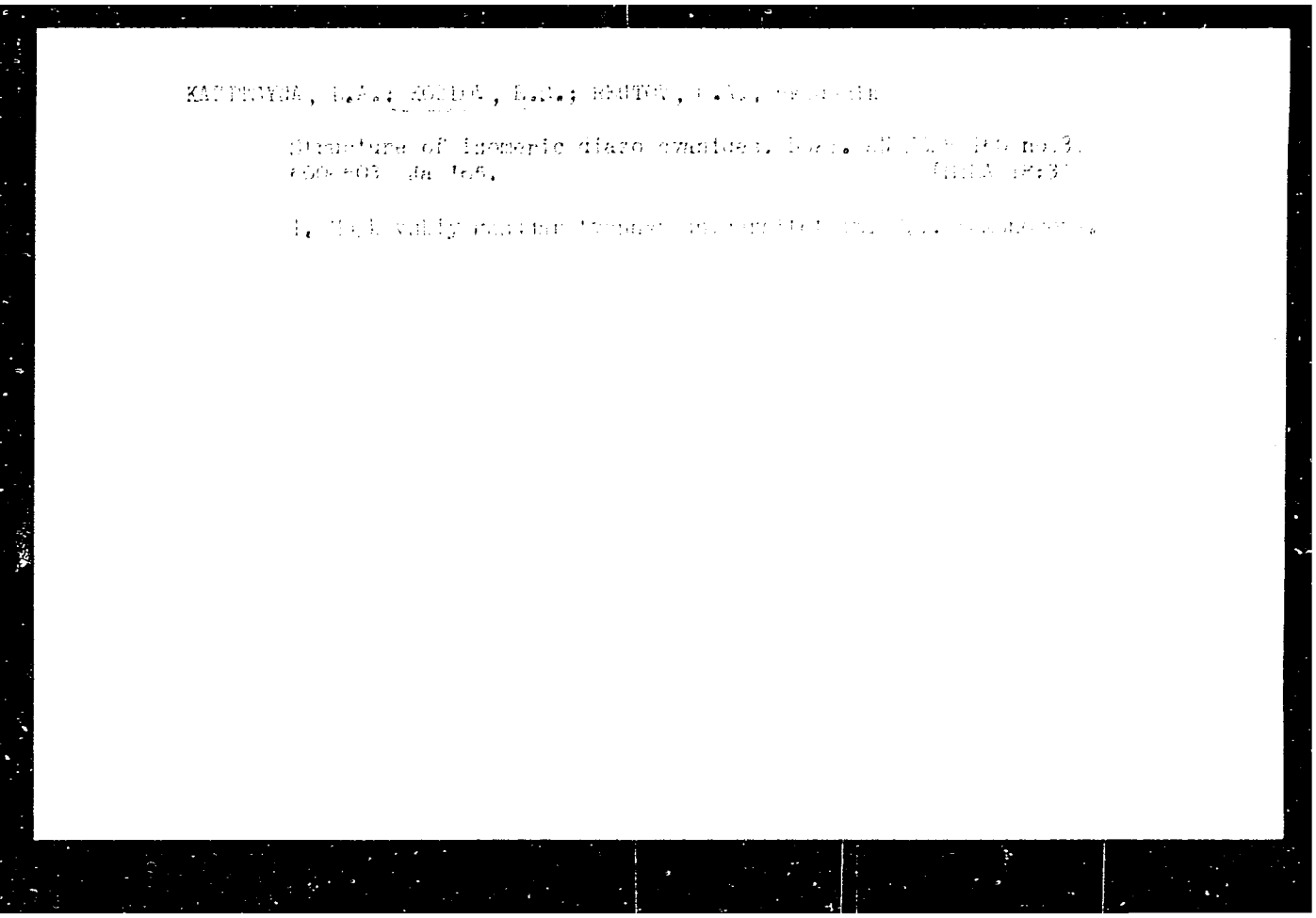
Phenyl esters of arenimino sulfonic avids. Zhur.ob.khim. 32 no.8:2585-2592 Ag '62. (MIRA 15:9)

1. Institut organicheskoy khimii AN Ukrainskoy SSR.
(Sulfonic acid) (Esters)

LEVCHENKO, Ye.S.; KOZLOV, E.S.; KIRSANOV, A.V.

Amides of areniminosulfonic acids. Zhur.ob.khim. 33 no.2:565-571 F '63. (MIRA 16:2)

1. Institut organicheskoy khimii AN UkrSSR.
(Sulfonamides)



L 3[illegible]-66 EWT(1)

ACC NR: AT6023931 SOURCE CODE: UR/3220/66/000/001/0059/0066

AUTHOR: Kozlov, E. S.

54
B+1

ORG: none

TITLE: Method of formation of symbols in displaying information on an electron-beam tube

SOURCE: Tsifrovaya vychislitel'naya tekhnika i programmirovaniye, no. 1. Moscow, 1966, 59-66

TOPIC TAGS: digital computer, display tube, information processing, electron beam, electron tube

ABSTRACT: Various well-known methods of character display on a tube screen, such as the shaped-beam method, Lissajous-figure method, raster-scan method are briefly reviewed. A method suggested by S. G. Chao (Electronics, Oct., 1959, 116-118), in which the coordinates of each symbol element are delivered to the display tube as definite height pulses deflecting the beam (raster sweep), is held to be better than other methods. This method: (a) permits obtaining any complex symbol configuration, (b) obviates the necessity for a special symbol-element storage, and (c) permits higher frequency of symbol shaping. The article very briefly describes a single-coordinate pulse shaper that operates on the above principle. The frame-repetition frequency of 25 cps was selected which, for a 1024-character matrix and a 32-pulse system, gives an element frequency of 819200 cps. The coordinate deflection is

UDC: 681.142.01

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L 38990-66

ACC NR: AT6023931

achieved electrostatically (31L033 tube); the line and frame deflection, magnetically. Sixteen lines with 64 symbols per line are used; flyback time, under 100 μsec. [03]
A block diagram is supplied. Orig. art. has: 3 figures.

SUB CODE: 09 / SUBM DATE: none / ORIG REF: 001 / OTH REF: 009/ ATD PRESS: 5050

Card 2/2

L 04843-67 EWP(j)/EWT(m) RM

ACC NR: AP7000244 SOURCE CODE: UR/0079/66/036/004/0760/0760

25
B

AUTHOR: Kozlov, E. S.; Drach, B. S.

ORG: Institute of Organic Chemistry, AN SSSR (Institut organicheskoy khimii AN SSSR)

"Some Conversions of Trichlorophosphazomethyl Dimer"

Moscow, Zhurnal Obshchey Khimii, Vol 36, No 4, 1966, p 760

Abstract: Trichlorophosphazomethyl dimer is converted by photochemical chlorination to trichlorophosphazotrichloromethyl monomer -- the most simple representative of the trichlorophosphazoperchloroalkyls. When trichlorophosphazotrichloromethyl monomer is treated with sulfur dioxide or an equimolar amount of formic acid, the known N-dichlorophosphonyliminophosgene is formed in quantitative yield. The dimer of trichlorophosphazomethyl is readily fluorinated by antimony trifluoride and gives the previously difficulty accessible 2,2,2,4,4,4-hexafluoro-1,3-dimethyloylcodiphosphazane in high yield. The authors thank A. V. Kirsanov for assistance and advice in this work. [JPRS: 37,177]

TOPIC TAGS: chlorinated organic compound, fluorinated organic compound, organic azo compound

Card 1/2 UDC: 547.419.1

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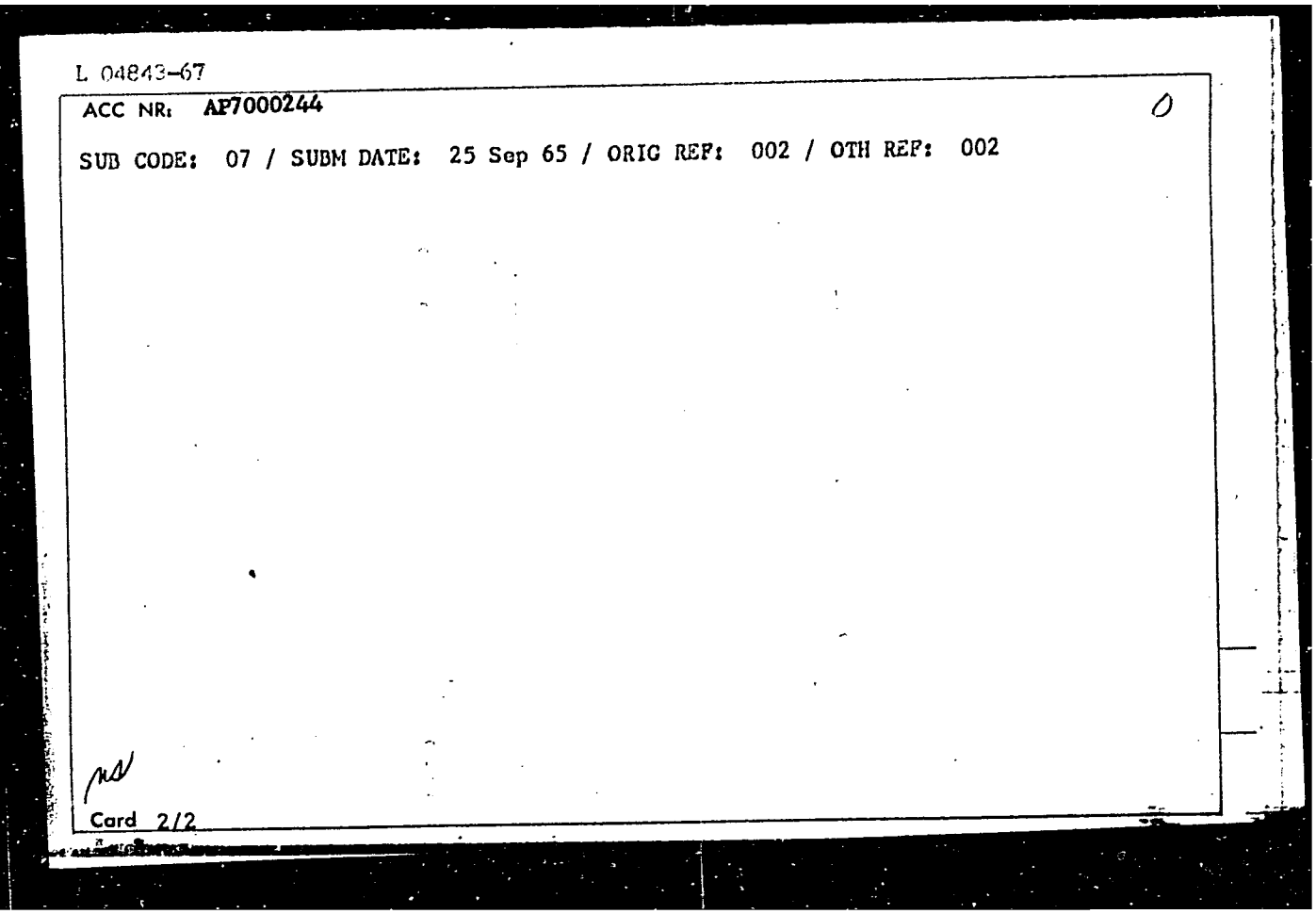

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ACC NR: AP7000244 0

SUB CODE: 07 / SUBM DATE: 25 Sep 65 / ORIG REF: 002 / OTH REF: 002

Card 2/2

NIKOLAYEV, N.S.; KOZLOV, E.S.; POLGORODNIK, N.P.; VITENBERG, I.M., kand. tekhn. nauk, retsenzent; VOSKRESENSKIY, N.N., inzh., red.; SMIRNOVA, G.V., tekhn. red.; GORDEYEVA, L.P., tekhn. red.

[The USM-1 analog computer for solving boundary value problems of equations in mathematical physics]Analogovaia matematicheskaia mashina USM-1; dlia resheniia kraevykh zadach uravnenii matematicheskoi fiziki. Moskva, Mashgiz, 1962. 293 p. (MIRA 15:12)
(Analog computers)

L 8443-66 EWT(d)/EWP(1) IJP(c) BB/GG

ACC NR: AP5025747 SOURCE CODE: UR/0286/65/000/018/0095/0095

47
B

AUTHORS: Kozlov, E. S.; Tyun'kov, V. S.

ORG: none

TITLE: An electric analog computer for solving boundary value problems with a moving phase boundary. Class 42, No. 174856 [announced by Scientific Research Institute of Control Computers (Nauchno-issledovatel'skiy institut upravlyayushchikh vychislitel'nykh mashin)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 18, 1965, 95

TOPIC TAGS: analog computer, boundary value problem, computer calculation

ABSTRACT: This Author Certificate presents an electric analog computer for solving boundary value problems with a moving phase boundary. The computer contains units of a special network, boundary conditions, nonlinear boundary conditions, and recording units. To simulate changes in the physical properties of substances, caused by an external influence, it contains a combined nodal point (consisting of automatically controlled resistances and capacitances) and switching circuits operating from the potential of the nodal point. The potential is automatically connected to the nodal point of the integrator, which has arbitrarily set integration limits. The nodal point of the network controls switching devices for simulation of the latent heat of fusion (solidification) of substances.

SUB CODE: 09/ SUBM DATE: 11Jul64 UDC: 681.142

BVK
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L 11442-67
ACC NR: AT6023935 SOURCE CODE: UR/3220/66/000/001/0103/0115

AUTHOR: Kozlov, E. S.; Tyun'kov, V. S.

ORG: none

TITLE: The use of digital logic elements of the Ural 10 assembly in analog devices for solving boundary value problems

SOURCE: Tsifrovaya vychislitel'naya tekhnika i programmirovaniye, no. 1, Moscow, 1966, 103-115

TOPIC TAGS: logic element, analog digital computer system, analog computer, computer design

ABSTRACT: This article examines the feasibility of using logic units of the Ural-10 assembly in network analog computers. Specific examples given of the operation of logic assemblies in these devices are in the boundary condition block, the synchronizer of this block, the frequency divider, the decade scaler, the boundary-condition automatic input, and the block controlling entry of parameters in the automatic resistance network. The results of using elements from digital technology in analog devices are reported and paths are marked out for further development of the concept of digital-analog combinations for solving boundary value problems. The main advantages of combined action are the drastic reduction of planning operations for electrical and functional circuits, the unification of designs and uniformity of elements enabling

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ACC NR: AT6023935

digital experience to be applied in planning units in analog networks, thus simplifying labor in making mockups of these systems and the reduction of assembly error, which is very important in debugging computers in general and network analog computers in particular. The reliability of Ural-10 subassemblies is so great that when blocks are correctly assembled they are ready to work and need scarcely any debugging. The future will see great development of the use of digital elements in network analog computers. This progressive step creates the real prerequisites for the creation of digital-analog complexes having the properties of digital computers and a network electric model, of particular use in solving complex engineering problems in the oil industry, chemistry, construction, and other fields in the national economy. Orig. art. has: 1 formula, 1 table, and 9 figures.

SUB CODE: 09/ SUBM DATE: none/ ORIG REF: 007/ OTH REF: 001

Card 2/2

KOZLOV, E.V.; POPOV, L.Ye.

Theory of the hardening of ordered solid solutions. Dokl. AN SSSR 152 no.3:595-597 S '63. (MIRA 16:12)

1. Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosudarstvennom universitete im. V.V.Kuybysheva. Predstavleno akademikom G.V. Kurdyumovym.

POPOV, L.Ye.; KOZLOV, E.V.

Slowing down of dislocations in superstructures. Izv. vys. ucheb. zav.; fiz. 8 no.4:11-16 '65. (MIRA 18:12)

1. Sibirskiy fiziko-tekhnicheskiy institut imeni V.D. Kuznetsova.
Submitted June 6, 1964.

KOZLOV, E.V.

A possible mechanism underlying the hardening of tightly packed solid solutions. Izv. vys. ucheb. zav.; fiz. no. 3: 171-172 '64. (MIRA 17:9)

1. Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosudarstvennom universitete imeni Kuybysheva.

POPOV, L.Ye.; KOZLOV, E.V.

Theory of the hardening of ordered solid solutions. Fiz. met. i metalloved. 17 no.5:755-759 My '64. (MIRA 17:9)

1. Sibirskiy fiziko-tekhnicheskiy institut.

KOZLOV, E.V.; POPOV, L.Ye.

Theory of the yield point of ordered solid solutions. Fiz. met. i metalloved. 18 no.6:939-940 D '64. (MIRA 18:3)

1. Sibirskiy fiziko-tekhnicheskiy institut.

POPOV, L.Ye.; KOZLOV, E.V.; KOZHEMYAKIN, N.V.

Theory of concentration inhomogeneities along the antiphased boundaries in ordered solid solutions. Izv. vys. ucheb. zav.; fiz. 8 no.1:129-134 '65. (MIRA 18:3)

1. Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosudarstvennom universitete imeni Kuybysheva.

KOZLOV, E.Ya.

Processing of polyester fibers in foreign countries; sizing and finishing. Tekst.prom. 22 no.12:76-78 D '62. (MIRA 16:1)

1. Glavnyy bibliograf TSentral'noy nauchno-tekhnicheskoy biblioteki legkoy promyshlennosti.
(Textile fibers, Synthetic)

KOZLOV, F., polkovnik

Vital and valuable experience. Starsh.-serzh. no.5:9 My '63.
(MIRA 16:10)

21.1320

77210
SOV/89-8-1-4/29

AUTHORS: Kirillov, P. L., Kozlov, F. A., Subbotin, V. I., Turchin, N. M.

TITLE: Purification of Sodium From Oxides and Methods of Control of Oxide Content

PERIODICAL: Atomnaya energiya, 1960, Vol 8, Nr 1, pp 30-36 (USSR)

ABSTRACT: Oxides in sodium used in liquid heat exchangers in reactors produce corrosion and tend to produce deposits in cooler parts of the contours which can cause clogging. The authors investigated, therefore, cold traps for oxides and a plug indicator for oxides. They wanted to avoid chemical methods which, besides being complicated and time-consuming, become extremely complex in the case of radioactive sodium. The setup on Fig. 2 utilizes the well-known relation between the solubility of oxygen in sodium and its temperature:

$$W = 2{,}7 \cdot 10^{-1} \left(\frac{t}{100}\right)^{3{,}6} \qquad (1)$$

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where W is solubility of oxygen (% weight); t is temperature ($^{\circ}$ C). It makes possible determination of oxide content. As soon as the temperature drops below the temperature of saturation for oxides in sodium, precipitation takes place, clogging the slots on the main valve, and the flow of sodium decreases as shown in Fig. 3. The authors varied oxygen concentration from 0.002 to 0.1% weight, the temperature from 110 to 550° C, and the size of slots from 0.5 x x 0.5 mm to 1 x 1 mm. The number of slots should be 10 to 15 to reduce effects of accidental clogging. The readings were independent of the cooling rate of sodium while the oxygen concentration varied between 0.008 and 0.02% weight, the metal velocity between 2.5 and 13 m/sec, and the rate of decrease of the valve temperature between 0.3 and 37° C/min. Table 3 shows comparative data from the method described here and the chemical analysis. The authors investigated the cold trap shown in Fig. 5. On this figure, 1

Purification of Sodium From Oxides and Methods of Control of Oxide Content

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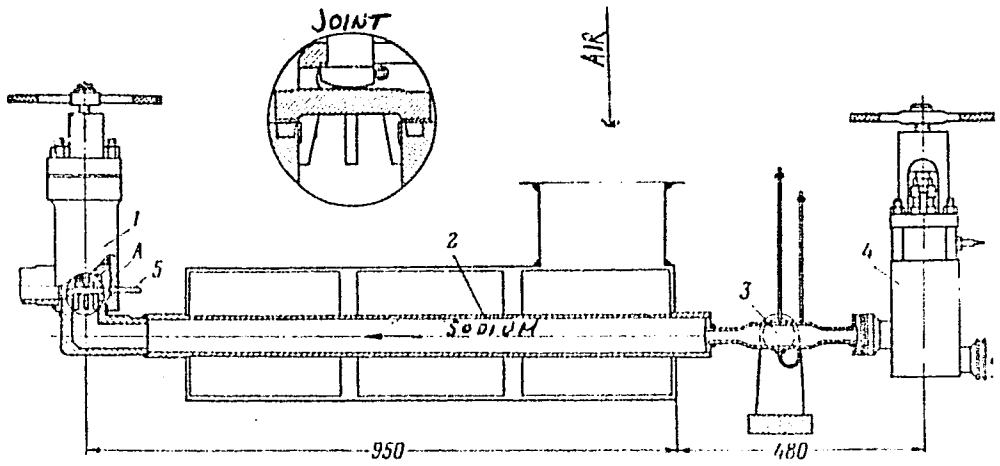

Fig. 2. Construction of plug indicator of oxides: (1) basic valve with radial slots in the disk stopping the oxide; (2) sodium-air heat exchange; (3) flow meter; (4) throttle valve; (5) thermocouple for temperature measurements at the clogging spot.

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Purification of Sodium From Oxides and Methods of Control of Oxide Content

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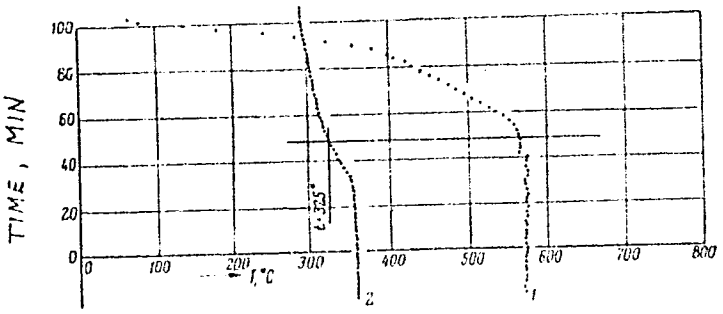

Fig. 3. Examples of registered curves of flow and temperature of sodium on the iterative (secondary) oxide indicator. (1) Emf of magnetic flow meter; (2) temperature of the flap of the basic valve.

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Table 3. Oxide content in the trap determined by the two methods, in g.

Number of the trap	Data from the indicator of oxides	Data from the gas analysis
1	890±100	1,000±500
10	4,750±700	6,200±900

Purification of Sodium From Oxides and Methods of Control of Oxide Content

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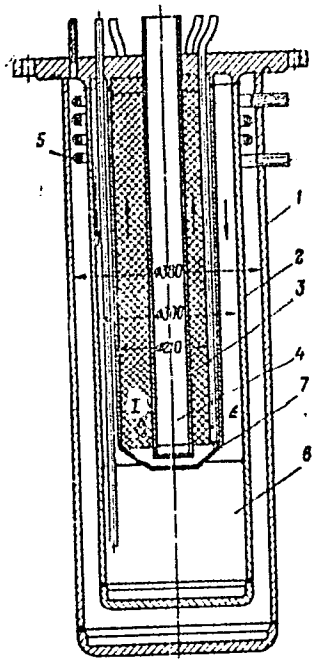

Fig. 5. Construction of cold trap. Capacity, 32 l of sodium.

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represents a jacket containing toluol as cooling agent. Toluol evaporates and then condenses on the water-cooled tubing 5. 2 is the main cylindrical container, with an inner cavity filled with chips or wires from stainless steel. This setup is safe against possible escape of sodium. 6 is a settling tank for oxides, and the cone 7 slows down the flow of metal through the settler. A nichrome heater at 4 provides preliminary heating. The reduction of oxygen concentration in sodium can be computed from the equation of matter balance:

$$\gamma V dc = \gamma Q (c - c') d\tau, \qquad (2)$$

where V is volume of sodium in the contour in m^3; c is concentration of oxygen in sodium in % weight; c', solubility of oxygen in the metal at temperature t' in

% weight (t' is lowest temperature of the metal in the trap); Q flow of metal through the trap in m^3/h; γ, specific gravity of the metal at the temperature of the contour, in kg/m^3; τ, operating time of the trap in hours. After discussing the conditions of validity of Eq. (2), the authors perform the integration and obtained:

$$c = c' + (c_0 - c')\, e^{-n} \qquad (3)$$

where c_0 is original concentration of oxygen in sodium; n is number of times the whole amount of sodium passed through the trap during time τ; $n = \frac{Q\tau}{V}$. This equation was used as a check on experimental results since a removal of oxides from the trap raised the experimental points above the calculated ones. The authors give detailed data about experimental results

with two traps of different sizes. They concluded that the cold trap can reduce the content of oxygen in sodium down to 0.002% weight, that any required reduction is possible by proper adjustment of operating conditions, that the efficiency of the trap increases after some oxides are already deposited; that chips in the trap work better than wire of 0.5 mm diameter, and that the capacity of the trap increases with the flow velocity. The authors measured also the variation of the concentration of oxygen as a function of n (the experimental points follow quite well the theoretical curve from Eq. (3)) and the longitudinal temperature distribution inside the trap. There are 4 tables; 7 figures; and 15 references, 8 Soviet, 2 U.K., 5 U.S. The 5 most recent U.K. and U.S. references are: A. McIntosh, K. Bagley, J. Brit. Nucl. Energy Conference, 3, Nr 1, 15 (1958); J. White, Nucl. Sci. Abstrs., 15, 8290 (1957); O. Salmon, T. Cashman, J. Inst. Metals,

Purification of Sodium From Oxides and Methods of Control of Oxide Content

77210
SOV/89-8-1-4/29

84, 7 (1956); J. Grey, R. Neal, B. Voorhess, Nucleonics, 14, Nr 10, 34 (1956); W. Bruggemann, J. Amer. Inst. Chem. Engr, 2, 153 (1956).

SUBMITTED: April 20, 1959

Card 10/10

35502
S/089/62/012/004/011/014
B102/B104

AUTHOR: Kozlov, F. A.

TITLE: Gasometric and gravimetric methods of assaying sodium for its oxygen content and their application to an analysis of the content of oxide traps

PERIODICAL: Atomnaya energiya, v. 12, no. 4, 1962, 332-333

TEXT: Two methods are proposed for determining the total and the specific oxygen content in cold traps which are used in sodium purification. The gasometric method is based on a measurement of the volumes (V) of H_2 and NaOH and the NaOH concentration (C) in the reaction of Na and its oxides with water or C_2H_5OH. The quantity (G) of oxides is calculated from

$$G_{Na_2O} = \frac{M_{Na_2O}}{2}\left(\frac{V_{NaOH}\,C_{NaOH}}{M_{NaOH}} - \frac{V_{H_2}}{V_o}\right),$$

where M are the molecular weights and V_o the molar gas volume. The results obtained agree with those obtained by the indicator method within the error limits. The gravimetric method is based on the high difference between the specific weight of Na and that

Card 1/2

Gasometric and gravimetric ...

of its oxides. The oxide concentration in a sample of volume V (cm^3) and weight G (g) is calculated from $C = \gamma_{Na_2O}(G - \gamma_{Na}V)/G(\gamma_{Na_2O} - \gamma_{Na})$,

γ - specific weight. The error due to impurities is less than 0.1%. There are 2 figures, 2 tables, and 4 references: 1 Soviet and 3 non-Soviet. The three references to English-language publications read as follows: L. Pepkowitz, W. Judd. Anal. Chem., 22, 1283, 1950; I. White, Ross W. Rohman. Anal. Chem., 26, 210, 1954; I. White, Nucl. Sci. Abstr. 15, 909, 1957.

SUBMITTED: March 23, 1961

Card 2/2

SUBBOTIN, V.I. (Moskva); KOZLOV, F.A. (Moskva); IVANOVSKIY, N.N. (Moskva)

Heat transfer to sodium under the combined action of free and forced convection and with precipitation of oxides on the heat exchange surface. Teplofiz. vys. temp. 1 no.3:409-415 N-D '63. (MIRA 17:3)

L 19832-65 EWT(m)/EPF(c)/EPF(n)-2/EPR/EWP(t)/EPA(bb)-2/EWP(b) Pr-4/Ps-4/Pu-4
IJP(c)/SSD/APWL JD/JW/DM
ACCESSION NR: AP4049541 S/0089/64/017/005/0406/0408

AUTHORS: Ivanovskiy, N. N.; Kozlov, F. A. 33
B

TITLE: Thermodynamic calculation of the reaction of sodium with water for a steam generator of the sodium-water type 27

SOURCE: Atomnaya energiya, v. 17, no. 5, 1964, 406-408

TOPIC TAGS: liquid metal cooled reactor, reactor hazard, reactor coolant, sodium water reaction 19

ABSTRACT: In view of the danger of water entering the sodium through the heat-transfer wall (if a single wall is used), the authors calculate the equilibrium constants of the possible sodium-water reactions and determine subsequently the equilibrium concentrations. The calculations are based on the assumption that the amount of water and its rate of entry into the system are such that no appreciable temperature rise is produced even at the leak. Re-

Card 1/4

sults for the three possible reactions

$$Na + H_2O \rightleftarrows NaOH + \frac{1}{2} H_2 \uparrow \quad (1)$$

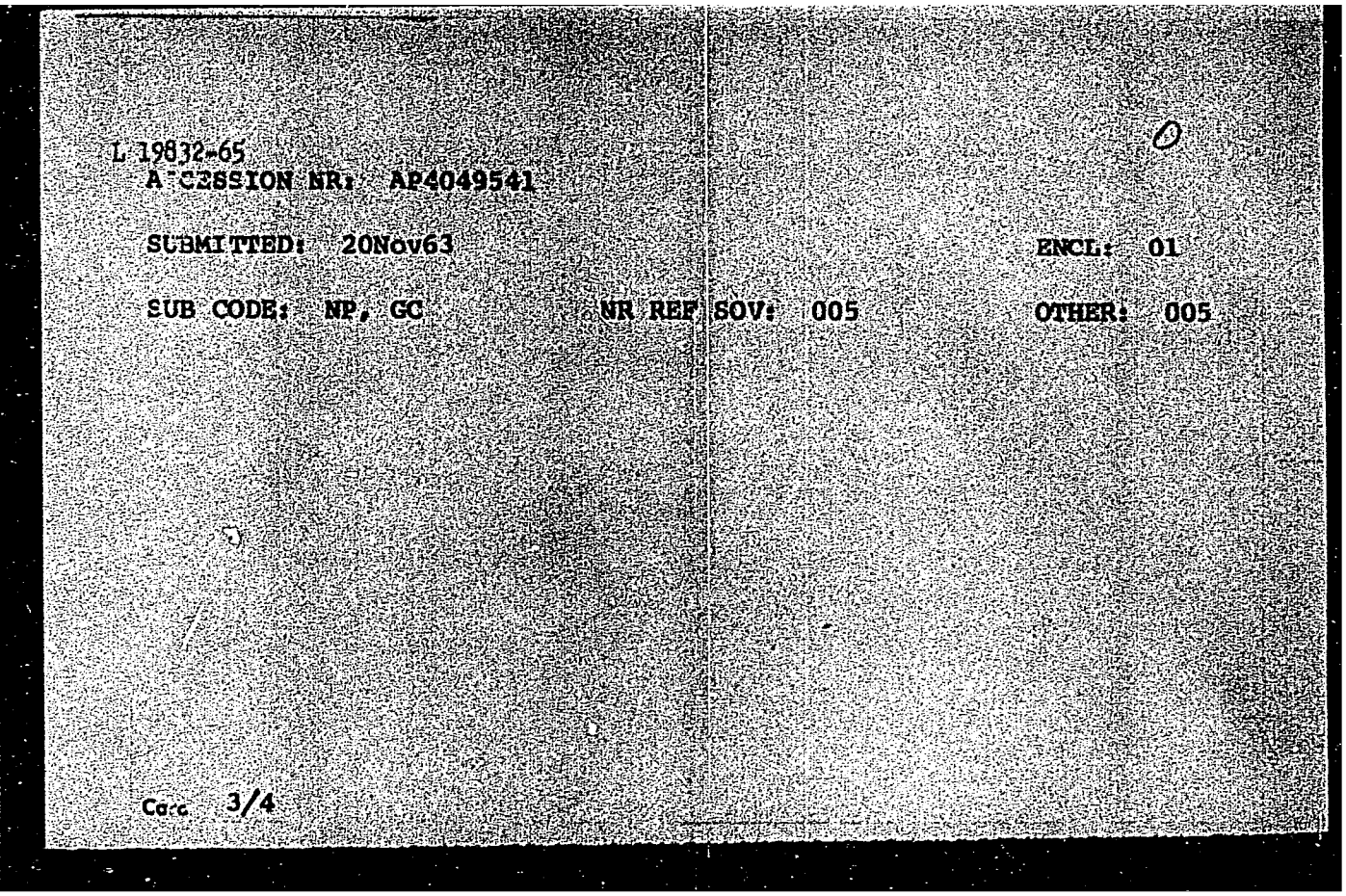
$$2Na + NaOH \rightleftarrows Na_2O + NaH; \quad (2)$$

$$NaH \rightleftarrows Na + \frac{1}{2} H_2 \quad (3)$$

are listed in Table 1 of the enclosure. (The calculations were made for reaction (2) only, and experimental data are given for the other two reactions.) The calculation shows that the main products of the reactions in thermodynamic equilibrium are sodium oxide, sodium hydride, and hydrogen. The effect of these products on the coolant loop operating conditions and possible ways of removing these products from the coolant are discussed briefly. Orig. art. has: 9 formulas and 1 table.

ASSOCIATION: None

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825820015-0"



L 19832-65
ACCESSION NR: AP4049541

SUBMITTED: 20Nov63 ENCL: 01

SUB CODE: NP, GC NR REF SOV: 005 OTHER: 005

Card 3/4

L 19832-65

ACCESSION NR: AP4049541

ENCLOSURE: 01

Results of thermodynamic calculations

Reaction	ΔH°_{298}	ΔZ°_{298}	$C_p = a + bT$: $a \times 10^3$	$C_p = a + bT$: $b \times 10^4$	ΔH°	$I_1 \times 10^3$	ΔZ°_T at 200 °C	ΔZ°_T at 300 °C	ΔZ°_T at 400 °C	ΔZ°_T at 500 °C	K_{aT} at 200 °C	K_{aT} at 300 °C	K_{aT} at 400 °C	K_{aT} at 500 °C
$Na + H_2O \rightleftarrows NaOH + \frac{1}{2} H_2$	—34	—33,91	—11,25	12,48	—31,23	—7,05	—33,3	—33,18	—32,5	—32,18	$8,9 \cdot 10^{15}$	$1,20 \cdot 10^{13}$	$7,83 \cdot 10^{10}$	$7,05 \cdot 10^{9}$
$2Na + NaOH \rightleftarrows Na_2O + NaH$	—10,59	—8,4	—5,85	6,56	—9,14	—2,98	—6,98	—0,12	—4,80	—4,3	$1,7 \cdot 10^{3}$	$2,14 \cdot 10^{2}$	38	16,6
$NaH \rightleftarrows Na + \frac{1}{2} H_2$	13,49	9	3,83	—4,68	12,56	0,906	0,27	4,67	+2,01	1,41	$1,20 \cdot 10^{-3}$	$1,60 \cdot 10^{-2}$	0,113	0,4

Card 4/4

BASHKIRIN, T.N.; MURAZOV, M.F.; KOZLOV, F.I.

Cave formation and the efficiency of methods for its control in the Novo-Elkhovskoye oil field. Burenie no.13:7-11 '65. (MIRA 18:5)

1. Trest "Al'met'yevburneft'".

BIKCHURIN, T.N.; IBATULLIN, R.Kh.; KOZLOV, F.A.

Effect of the power supplied to bits of decreased diameter on the indices of their operation. Burovaia no.4:4-10 '65. (MIRA 18:8)

1. Trest "Al'met'yevburneft'".

L 1927-66 EPA(s)-2/EWT(m)/EPF(c)/EPF(n)-2/EWA(d)/T/EWP(t)/EWP(z)/EWP(b) MJW/JD/WW/JG/WB/DM

ACCESSION NR: AP5023777 UR/0089/65/019/003/0298/0300
621.039.534.6

AUTHOR: Subbotin, V. I.; Kirillov, P. L.; Kozlov, F. A.; Ivanovskiy, N. N.; Makarov, V. M.

TITLE: Removal of the products of interaction with water from sodium in a circulation loop

SOURCE: Atomnaya energiya, v. 19, no. 3, 1965, 298-300

TOPIC TAGS: sodium, sodium compound, nuclear power plant, liquid metal cooled reactor

ABSTRACT: In high-capacity nuclear power plants, the use of a "sodium-water steam generator with a single heat-transfer wall is very promising. However, a substantial amount of water may reach the sodium loop, and an important problem is the removal of products formed by the reaction with water from the sodium. The present study is made in a standard sodium circulation loop. The removal of sodium hydride is investigated by introducing hydrogen and using a cold trap to filter the sodium. Experiments on removal of products of the reaction with water

$$4Na + H_2O \rightarrow Na_2O + 2NaH$$

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L 927-66

ACCESSION NR: AP5023777

2

were similar. The data show that the purification of sodium involving removal of hydrogen, Na_2O and 2NaH by means of the cold trap and the monitoring of the content of these substances are fully satisfactory. No signs of corrosion are observed on 1Kh18N9T steel at 400C after a 2000-hr. contact with the sodium-water reaction products. Orig. art. has: 3 figures.

ASSOCIATION: none

SUBMITTED: 01Mar65 ENCL: 00 SUB CODE: NP, GC

NO REF SOV: 003 OTHER: 001

2/2

KOZLOV, F.A.; ANTONOV, I.N.

Dependence of the heat conductivity of sodium on the oxide concentration. Atom. energ. 19 no.4:391-392 O '65.
(MIRA 18:11)

BIKCHURIN, T.N.; IBATULLIN, R.Kh.; KOZLOV, F.A.; MURANOV, M.P.

Means for increasing the efficiency of one-roller bits in turbodrilling. Neft. khoz. 43 no.8:29-36 Ag '65. (MIRA 18:12)

ACC NR: AP5026450 SOURCE CODE: UR/0089/65/019/004/0391/0392

AUTHOR: Kozlov, F. A.; Antonov, I. N.

ORG: none

TITLE: The dependence of sodium heat conductivity upon the concentration of oxides

SOURCE: Atomnaya energiya, v. 19, no. 4, 1965, 391-392

TOPIC TAGS: ~~nuclear reactor coolant, liquid metal cooled reactor~~ THERMAL CONDUCTION, SODIUM, OXIDE FORMATION, HEAT LOSS

ABSTRACT: The thermal conductivity of sodium was determined by using a stainless steel tube (d = 66 mm) with accumulated oxide deposits. The upper part of the experimental tube was electrically heated while the bottom was cooled by running water. Thus, a heat flow was created, heat losses were checked and the temperatures in various places were measured including the metal surface of the tube and the outside surface of the enveloping insulating cylinder H = 700mm, d = 250 mm. The maximum temperature of the insulating surface was 303 K. The experimental data on the sodium heat conductivity for various oxide concentrations were adjusted for a temperature of 328 K. The results showed that the sodium thermal conductivity decreased by more than 50% when the oxide concentration reached an amount of 60% (by weight). In

UDC: 621.039.534.6

L 33384-66
ACC NR: AP5026450

one sample, in which the content of oxygen was 0.13 wt. %, the thermal conductivity was 123.6 w/m .deg C. The experiments proved that the thermal conductivity of a layer consisting of sodium and sodium oxide was less than that of pure sodium. The presence of oxide deposits on the heat exchange surface can, therefore, distort the results in calculating the heat transfer to liquid metals. Orig. art. has: 2 figures.

SUB CODE: 20/ SUBM DATE: 31Oct64/ ORIG REF: 004/ OTH REF: 002

Card 2/2 JS

L 04676-67 EWP(e)/EWP(k)/EWT(d)/EWT(m)/T/EWP(v)/EWP(t)/ETI/EWP(l) IJP(c)
ACC NR: AP6021525 WW/JD/JG/JR SOURCE CODE: UR/0089/66/020/006/0482/0485

AUTHOR: Subbotin, V. I.; Kozlov, F. A.; Ivanovskiy, N. N.; Makarov, V. M.

ORG: none

TITLE: Detection of leaks in steam generators of the sodium-water type

SOURCE: Atomnaya energiya, v. 20, no.6, 1966, 482-485

TOPIC TAGS: liquid metal cooled reactor, sodium, hydrogen, nuclear reactor technology, nuclear safety

ABSTRACT: After showing that the most sensitive method of detecting small leaks from the steam generator is one based on the diffusion of hydrogen from the sodium into vacuum, the authors describe the construction of two pickups, one used in the liquid-sodium stream and the other in the gas space over the circulating sodium, and the test loop for this purpose (Fig. 1). The experimental procedure, the calibration, and the plotting of the pickup characteristics are described. The characteristics of the entire system are obtained as functions of the temperature, the hydrogen concentration in the sodium, and the velocity of the flowing sodium. The results show that the penetration of the hydrogen from the gas phase into the pickup and from the sodium into the pickup is approximately the same for a given concentration. Both pickups begin to detect the presence of hydrogen at sodium temperatures higher than 360C. The pickup placed in the gas over the sodium, however, exhibited a larger time delay and gave less unambiguous results as a function of the sodium hydride content in the

Card 1/2 UDC: 621.039.534.6: 621.039.534: 44

L 04676-67
ACC NR: AP6021525

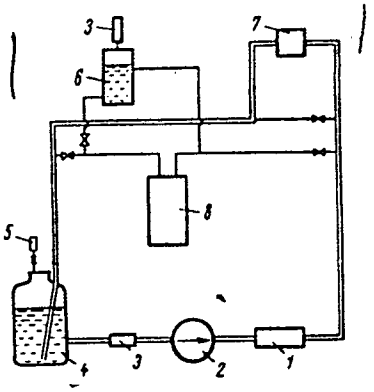

Fig. 1. Diagram of installation. ═══ Main loop, ——— auxiliary loop; 1 - heater, 2 - centrifugal pump, 3 - hydrogen pickup, 4 - pump tank, 5 - water and hydrogen supply, 6 - auxiliary tank with gas volume, 7 - oxide indicator, 8 - sodium trap.

sodium, and a greater dependence on the sodium velocity was observed. It is concluded that by making use of the unique dependence of the penetrability of hydrogen from sodium through nickel into vacuum it is possible to produce an instrument which not only detects leakage from the steam generator, but also determines continuously and remotely the content of the hydrogen in the sodium and in other reactor coolants. Orig. art. has: 5 figures, 3 formulas, and 1 table.

SUB CODE: 18/ SUBM DATE: 30Dec65/ ORIG REF: 004/ OTH REF: 003

Card 2/2

KOZLOV, F.A. (Khar'kov)

Operative treatment of varicocele. Urologiia 23 no.3:24-25 My-Je '58 (MIRA 11:6)
(VARICOCELE, surg.
indic & technic (Rus))

SUMBATOV, R.A.; IBATULLIN, R.Kh.; BIKCHURIN, T.N.; KOZLOV, F.A.

Drilling wells of decreased diameter using a turbotachometer.
Neft. khoz. 42 no.6:12-17 Je '64. (MIRA 17:8)

KOZLOV, F. B.

Grasses

97 tsentners of hay per hectare. Sots. zhiv. 14 no. 7, 1952.

9. Monthly List of Russian Accessions, Library of Congress, ~~December~~ 1952, Uncl.

KOZLOV, F.B., agronom.

Sowing perennial grasses on peat soils. Zemledelie 5 no.7:85 Jl '57.
(Grasses) (Peat soils) (MLRA 10:8)

KOZLOV, F.M.

MEKLER, M.M., otvetstvennyy red.; BASHLAVINA, G.N., red.; VORONINA, A.N., red.; GUREVICH, I.V., red.; ZASLAVSKIY, I.I., red.; KOZLOV, F.M., red.; LARIN, D.A., red.; RAUSH, V.A., red.; SAMOYLOV, I.I., red.; SLADKOVAYA, Ye.A., red.; STROYEV, K.F., red.; SHCHASTNEV, P.N., red.; TUTOCHKINA, V.A., red.; SHUROV, S.I., predsedatel', red.; ERDELI, V.G.

[Geographical atlas for the fifth grade] Geograficheskii atlas dlia 5-go klassa. Moskva [1957] 16 p. (MIRA 11:7)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye geodezii i kartografii.

(Maps)

KOZLOV, F.M.

KARAVAYEVA, Z.F.; KOZLOV, F.M.; ARTAMONOV, G.V., redaktor; KOMAR'KOVA, L.M., redaktor izdatel'stva; ROMANOVA, V.V., tekhnicheskiy redaktor

[Maps and atlases; a catalog] Karty i atlasy; katalog. [Moskva] Glavknigotorg M-va kul'tury SSSR, 1957. 199 p. ___ [Blank for ordering from the catalog "Maps and atlases." Zakaz po katalogu "Karty i atlasy." 1957. 39 p. (MIRA 10:11)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye geodezii i kartografii.
(Maps--Catalogs)

DRIATSKAYA, E.M., otv.red.; SHUROV, S.I., red.; BASHLAVINA, G.N., red.; VORONINA, A.N.; GUREVICH, I.V., red.; ZASLAVSKIY, I.I., red.; KOZLOV, F.M., red.; LARIN, D.A., red.; RAUSH, V.A., red.; SAMOYLOV, I.I., red.; SLADKOVA, Ye.A., red.; STROYEV, K.F., red.; SCHASTNEV, P.N., red.; TUTOCHKINA, V.A., red.; ERDELI, V.G., red.

[Geography atlas for the sixth grade] Geograficheskii atlas dlia 6-go klassa. Moskva, 1958. 32 p. (MIRA 12:9)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye geodezii i kartografii. 2. Nauchno-redaktsionnaya kartosostavitel'skaya chast' TSentral'nogo nauchno-issledovatel'skogo instituta geodezii, aeros"yemki i kartografii.
(Maps)